

Portland Facility Profile

[Facility Profile](#)

[Dry Dock Details](#)

[Repair & Lay-Up Berths](#)

[Crane Capacity](#)

[Facility Lay-out](#)

[Driving Directions](#)

All Locations

[Portland Shipyard](#)

[Port Angeles, Washington](#)

[Astoria, Oregon](#)

If you need driving directions to Portland Shipyard you will find them [here](#).

Legend

Building 4

- Bay 1:** Columbia Wire & Iron, Thermal Services, Inc.
- Bay 2:** Tyco Submarine Systems Ltd.
- Bay 3:** Open
- Bay 4:** Open
- Bay 5:** Open
- Bay 6:** Laborers
- Bay 7:** Receiving
- Bay 8:** Main Warehouse, Boilermakers
- Bay 9:** Boilermakers, Plate Shop, Layout Loft
- Bay 10:** Electricians, Main Tool Room, Carpenters, Sheet Metal
- Bay 11:** Pipefitters

Building 9

- Marine Machinists, Quality Assurance & Accounting (annex)

Building 10

- Environmental Matters
- Human Resources
- Support Services

Marine Chemist
Nozl-Tech
Ron Nisbet
Don Hudson

US Navy
Farr West Marine
Northwest Environcon (Global)
W&O Supply

US Coast Guard
John C. Murdock
Walashek Industries
Thermal Services Inc.

Building 43

- International Testing

Building 50

- Safety Department
- Dockmasters
- Crane Department and Riggers
- Marine Propulsion Services (MPS)

Building 60

- SSD Maintenance

Building 63

- Outside Machinists

Building 64

- Lips Propellers

Building 71

- Executive Offices
- Estimating and Project Management
- Ship Superintendents
- Industrial Division
- Production Management
- Data Processing

Building 72

- Owners' Representative Offices
- American Bureau of Shipping (ABS)
- Customer Service
- Owner and CGI Storage Areas
- Cafeteria

Building 73

- [Blast and Coat Facility](#)

Building 80

- Pacific Dynamics Corp. (PDC)
- Diamond K
- [Voyage Repair Division](#)

[Cascade
General](#)

[Ship Repair
Service](#)

[Locations &
Facilities](#)

[International
Representatives](#)

[Human
Resources](#)

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Comptroller
E. W. BAUER

Mgr., Research
Planning and Inf.
W. S. DIRKER

Chief Engineer
R. P. DOW



Swan Island, P.O. Box 3529, Portland, Oregon 97208

Telephone 503-285-5271

September 7, 1965

In reply refer to:

E. V. Prentice Company
2303 N. Randolph Avenue
Portland, Oregon

Attention: Mr. David V. Prentice

Dear Mr. Prentice:

At the time your company accepted the rental of 8,000 sq. ft. of space in bay 9 of building 4 on Swan Island, it was understood that additional space therein would likely be used as the work expanded.

It is now noted that eight (8) column sections in bay 9 are used for your operations. This space represents an area 160 ft. in length by 77 ft. in width, or 12,320 sq. ft. Since the original rental on June 1st was for 8,000 sq. ft., there is 4,320 sq. ft. additional now being occupied.

Effective September 1, 1965, this additional space will be added to the rent at the rate of 3-1/2¢ per sq. ft. per month. The added rent will be \$151.20 per month, which will be a total of \$431.20 per month.

Your acknowledgement of this use of additional space, and the rental thereof by signature in the lower left corner hereof, will be appreciated.

Yours very truly,

THE PORT OF PORTLAND

C. H. Cover
Properties Manager

Acknowledged: Sept 8, 1965

By David V. Prentice (date)
E. V. Prentice Company

CHC/lr

cc: Accounting Dept.,
E. V. Prentice Co.

NOTED:

ACCOUNTING DEPT.

PSY500009701

BILL OF SALE

*attach to
contract 87*

KNOW ALL MEN BY THESE PRESENTS:

That RICHFIELD OIL CORPORATION, a corporation, party of the first part, for and in consideration of the sum of ONE DOLLAR (\$1.00), lawful money of the United States of America, to it in hand paid by THE PORT OF PORTLAND, Portland, Oregon, party of the second part, the receipt whereof is hereby acknowledged, does, by these presents, GRANT, BARGAIN, SELL AND CONVEY unto the said party of the second part, all of its right, title and interest in and to the following described personal property, to-wit:

2 1,000-gallon underground gasoline storage tanks

Said personal property is located at the SWAN ISLAND AIRPORT, Portland, Oregon.

TO HAVE AND TO HOLD the same unto the said party of the second part, its executors, administrators and assigns forever.

IN WITNESS WHEREOF, the party of the first part has hereunto executed these presents this 19th day of January, 1938.

RICHFIELD OIL CORPORATION

By

W. M. Anderson

DM

May 28, 1965

Mr. John Caudero, President
— Progress Electronics
5652 N. Lagoon Avenue
Portland, Oregon

Dear Mr. Caudero:

This is to confirm your telephone call of this date, May 28, 1965, advising the Port of Portland that your intent to vacate certain space within Building 77, identified as 5676 and 5678 N. Lagoon Avenue, representing (1,493) sq. ft., more or less.

1,536 CHC

The rental rate applied to the space in accordance with your lease agreement is \$3.03 per square foot per month which is a total of \$44.82 per month.

46.08 CHC + \$1.00 per sq. ft. = \$51.08 per month

The termination date of the space will be effective as of May 31, 1965.

Thank you for giving The Port notice of your intent to vacate the above space.

Yours very truly,

THE PORT OF PORTLAND

CHC

Carl H. Cover, Manager
Properties Department

CHC:ddg

cc: Mr. E.W. Bauer

Contract File

M. L. Arnold

NOTED

67 *7-1-65*

PSY500009703

April 10, 1973

Mr. Marvin Johnson
Swiss Mobile Kitchen
6933 North Lombard
Portland, Oregon

Dear Mr. Johnson:

Failure of your company to pay the fee set forth in Section 1 of the agreement between the Port of Portland and Swiss Mobile Kitchen dated October 1, 1972 makes it necessary for the Port of Portland to terminate this agreement as of May 1, 1973 in accordance with Section 9 of this agreement.

This letter shall constitute official notice of termination by the Port.

Very truly yours,

PORT OF PORTLAND

Carl F. Propp, Manager
Swan Island Ship Repair Yard

CFP:ds

cc: L. E. Taylor

as corrected and approved by Brian Freeman

*This K
Cancelled
by this letter
Remove from
your stuff
B.*



October 1, 1972

Port of Portland

Box 3529 Portland, Oregon 97208

503/233-8331

TWX: 910-464-6151

FAX: FDH

Mr. Marvin Johnson
Swiss Mobile Kitchen
6933 North Lombard
Portland, Oregon

Cancelled

PERMIT TO PROVIDE MOBILE CATERING SERVICE

This is to advise that the Port of Portland will permit Swiss Mobile Kitchens to provide mobile catering service to the ship repair yard employees on Swan Island.

By this letter, this permit is subject to the following:

1. Permit Fee: 5% of the daily gross sales of all merchandise is to be paid to the Port on or before the 10th day of each succeeding month following the sales. Such percentage is to be calculated on gross sales beginning on October 1, 1972, and is to continue thereafter unless otherwise notified in writing.
2. Quality of Merchandise: All food, beverage and other merchandise shall be of the same or better quality than offered at your other locations.
3. Prices: All prices of merchandise offered shall be reasonable and consistent.
4. Mobile Equipment: All mobile equipment used to carry and dispense merchandise shall be clean and attractive at all times and shall meet all state, county and city regulations applicable.
5. Catering Service Personnel: Each person representing the catering company as driver, salesman and dispenser of merchandise shall be neat, clean and courteous while conducting such service as provided herein.

offices also in Tokyo,
New York, Chicago, Washington, D.C.

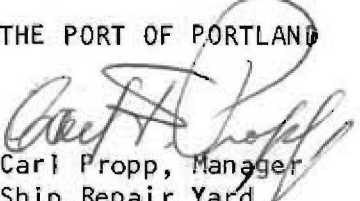
PSY500009706

6. Areas to be Served: The areas from which the mobile catering are to serve employees will be (a) on the west side of Lagoon Avenue near the Marine area main gate, (b) adjacent to the Marine lunchroom and the dry dock area, and (c) at such other area in the ship repair yard as may be requested by the ship repair yard manager, as the work conditions indicate the necessity to amply serve the workers. These areas shall be left clean and free from litter which originated from the dispensing source.
7. Number of Vehicles on Hand: There shall be one vehicle at each of the areas designated in Section 6 (a) and (b) hereof and such other vehicles as may be determined necessary to adequately provide catering service to the workers.
8. Time of Service: (a) The catering service and sale of merchandise may be offered outside the ship repair yard main gate no sooner than 10 minutes before 12 noon and at each change of shift for workers, and no later than 20 minutes after 12 noon or 5 minutes after each shift change. (b) Service within the main gate and ship repair yard area shall not commence sooner than 12 noon and shall cease within 20 minutes after the hour of noon. Any service within the ship yard areas other than above set forth shall only be permitted by approval of the ship repair yard manager.
9. Cancellation of Service: The Port may for any reason cancel the catering service hereby granted.

An acceptance of the above permitting service by your company is to be acknowledged by affixing an authorized signature in the lower left hand corner hereof. A completed copy will be returned to you for your file.

Very truly yours,

THE PORT OF PORTLAND


Carl Propp, Manager
Ship Repair Yard


SWISS MOBILE KITCHEN

APPROVED


By 


Title


Date

10-10-72

THE PORT OF PORTLAND


Executive Director

APPROVED AS TO FORM


of Counsel for The Port of Portland

SCS ENGINEERS

April 15, 2005
File No. 04204031.00

Mr. David Lampe
Rinker Materials, Pacific Rock Products
8705 Northeast 117th Avenue
Vancouver, Washington 98662

Subject: Phase I Environmental Site Assessment for the Swan Island Lease Property located on North Channel Avenue, Portland, Oregon.

Dear David:

Enclosed two copies of the Phase I Environmental Site Assessment (ESA) report for the subject property located on the Portland Shipyard at North Channel Avenue on Swan Island, Portland, Oregon. The ESA was prepared by Daniel Venchiarutti and Gregory Helland, in general accordance with ASTM Standard E 1527-00 for environmental assessments, the draft "all appropriate inquiry (AAI)" standard, and SCS Engineers' proposal dated December 14th, 2004. You authorized us to proceed with this work on March 8th, 2005.


SCS Engineers appreciates the opportunity to provide environmental consulting services to Rinker Materials. Please contact either of the two undersigned should you have any questions.

Sincerely



Daniel A. Venchiarutti, R.G.
Project Director
SCS ENGINEERS

attachment



Gregory D. Helland, R.G.
Project Director
SCS ENGINEERS

PSY500009708

**Phase I Environmental Site Assessment
Report**

**Swan Island Lease Property
North Channel Avenue
Portland, Oregon 97217**

Prepared by:

SCS ENGINEERS

2405 140th Avenue Northeast
Suite 107
Bellevue, Washington
425-746-4600

Prepared for:

Rinker Materials, Vancouver
8705 NE 117th Avenue
Vancouver, WA 98662
(360) 254-7770

Standard:

ASTM E 1527-00
AAI (Draft)

April 2005
File No. 04204031.00

PSY500009709

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APPENDIX

- A. Site Vicinity Map
- B. Site Plan
- C. Site Photographs
- D. Historical Research Documentation (including selected Port of Portland Archive Documents)
- E. Regulatory Records Documentation

DISCLAIMER

This report has been prepared for Rinker Materials with specific application to an environmental site assessment for the proposed Swan Island lease property located on the Portland Shipyard, Portland, Oregon. This report has been prepared in accordance with the care and skill generally exercised by reputable professionals, under similar circumstances, at this or similar localities. No other warranty, either express or implied, is made as to the professional advice presented herein. No other party, known or unknown to SCS Engineers, is intended as a beneficiary of this work product, its content or information embedded herein. Third parties use this report at their own risk. SCS Engineers assumes no responsibility for the accuracy of information obtained from, compiled or provided by third-party sources such as regulatory agency listings.

User Reliance

This reliance statement is written in respect to a Phase I Environmental Site Assessment conducted at the subject property located in the vicinity of North Channel Avenue on Swan Island, Portland Oregon, the "Property". SCS Engineers has been retained by Rinker Materials to provide a Phase I Environmental Site Assessment Report, the "Report" on the Property. Please be advised that Rinker Materials can rely on the Report entitled *Phase I Environmental Site Assessment, Swan Island Lease Property, North Channel Avenue, Portland, Oregon 97217*, subject to the terms and conditions of the contract between SCS and Rinker Materials.

SUMMARY

SCS Engineers performed a Phase I Environmental Site Assessment (ESA) of the property known as the Swan Island Lease Property located on the Portland Shipyard in the vicinity of North Channel Avenue, Portland, Oregon 97217, hereafter referred to as the subject property. The purpose of the investigation was to evaluate the potential presence of hazardous materials, substances, waste and recognized environmental conditions. In addition, this investigation was performed in order to evaluate the potential for such materials to have migrated onto the subject property from adjacent or nearby properties. The investigation included a limited inspection of the subject property, the exterior of adjoining properties, consultation with state regulatory offices, and review of appropriate federal, state, and local historical and environmental records.

This summary does not contain all the information found in the full report. The report should be read in its entirety to obtain a more complete understanding of the information provided, and to aid in any decisions made or actions taken based on this information.

Recognized Environmental Conditions

SCS Engineers performed a Phase I ESA in conformance with the scope and limitations of ASTM Standard Practice E 1527-00 and consistent with the draft "all appropriate inquiry (AAI)" standard for the Swan Island Lease Property located in the vicinity of North Channel Avenue, Portland, Oregon (see Appendix A, Figure 1). Any exceptions to, or deletions from, this practice are described in Sections 1 and 9 of this report. This assessment has revealed the following evidence of recognized environmental conditions in connection with the property:

- Residual levels of vinyl chloride (ranging between 1.3 and 6.2 ug/l) have been documented onsite groundwater at MW-11. Although DEQ has not pressed further investigation of this issue, and the known contamination does not appear to currently represent a risk to Rinker's proposed lease of the site, the lack of upgradient data regarding the potential source(s) of this contamination is considered to be a significant data gap for the property owner.
- Ecological and human health risks related to low-level residual arsenic, copper, lead and zinc levels in the surface soils will likely need to be assessed in the vicinity of the subject property to determine whether source control measures will need to be implemented along the Willamette River shoreline. If source control measures become necessary, it is not anticipated that Rinker activities on the uplands portions of the lease would be significantly impacted. However, depending on the scope and scale of a proposed future remedy, the potential for impacts to Rinker's loading/unloading activities along the Willamette River shoreline remains uncertain.

Conclusions and Recommendations

SCS Engineers has completed an ESA for the subject property. Based on a site reconnaissance, interviews with individuals knowledgeable about the subject property, and a review of regulatory and site documents, the following conclusions and recommendations are provided:

- The available data indicate low level soil and groundwater contamination persists on select areas on the subject property. The contamination represents an existing condition that the Port is obligated to manage. The existing condition is not anticipated to impact Rinker's proposed lease activities on the subject property.
- Although the available information regarding the past use of the subject property indicates that industrial activities occurred on and adjacent to the site, and that a series of environmental

investigations were subsequently completed at these locations, these historical activities are not considered to currently represent a threat to the environmental condition of the subject property.

- Due to the uncertainties associated with future the source control assessment at the subject property and the adjacent Willamette River shoreline, and the degree to which source control Best Management Practices (BMPs) will be required by DEQ, it is recommended that Rinker Materials include language in their lease assuring Rinker's future access to the shoreline for materials loading and unloading activities.

No further investigation pertaining to soil or groundwater contamination issues is recommended with regard to Rinker Materials' proposed lease of the subject property.

1. INTRODUCTION

This report provides the results of the Phase I Environmental Site Assessment (ESA) for the property known as the Swan Island Lease Property located on the Portland Shipyard in the vicinity of North Channel Avenue, Portland, Oregon (Figure 1), hereafter referred to as the subject property. Authorization for this assessment was provided by David Lampe of Rinker Materials on March 8th, 2005. This report is subject to the limitations noted below and in the disclaimer (page iii).

The subject property is owned by the Port of Portland (Port) and is referred to in various documents as the North Channel Fabrication Site. Rinker Materials anticipates leasing the subject property from the Port, and developing an asphalt and concrete operation to better serve the Portland market.

Purpose

The purpose of this investigation was to identify evidence of recognized environmental conditions that may have an adverse environmental impact on the subject property or in the immediate adjoining area. ASTM Standard E 1527-00 defines recognized environmental condition as:

"The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or material threat of a release of any hazardous substances or petroleum products into structures on the property or into ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with the law. The term is not intended to include *de minimus* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimus* are not recognized environmental conditions."

This assessment is intended to constitute an appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice, required by the innocent landowner defense under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA a.k.a. Superfund), the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the Small Business Liability Relief and Brownfields Revitalization Act of 2002. This process satisfies one requirement to qualify for the innocent landowner defense to CERCLA liability.

Additionally, an environmental investigation is a valuable risk assessment tool that will help a purchaser, owner, lending institution, buyer and investor identify asset management issues (business environmental risk) that may have a significant material impact on the property value, use of the asset or its future marketability. This knowledge will allow for more informed negotiations in a real estate transaction. The assessment can also be the basis for preserving, creating, and adding value to the asset and at the same time eliminating or reducing future contingent liability for the tenant or owner. Consideration of business environmental risk may involve addressing one or more non-scope considerations listed in Section 10 of this report.

It should also be noted that the format and content of this ESA report is structured to be consistent with the substantive requirements under the "all appropriate inquiry (AAI)" standard (40 CFR Part 312, August 26, 2004). The AAI standard is currently in draft form, and is expected to be finalized later in

2005. Preparation of this Phase I ESA consistent with the draft AAI standard is a requirement of the Port's proposed lease agreement for the subject property.

Detailed Scope of Study

This ESA was performed by SCS Engineers in general accordance with the considerations set forth in the American Society for Testing and Materials (ASTM) standards for environmental assessments (ASTM E 1527-00) and in accordance with the draft AAI standard.

This ESA is based on:

- Discussions with Port real estate and environmental staff and the Port's environmental contractor.
- Field observations and interviews made during a site reconnaissance performed on April 6, 2005.
- Review of available historical documents, including, property atlases, aerial photographs, topographic maps, and available environmental reports and related documents. The majority of these documents were provided by the Port.
- Review of federal, state, and local regulatory databases. The search distances are those specified by ASTM Standard E 1527-00.
- Review of state and local regulatory files.

As required by the AAI standard, SCS Engineers declares that to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40CFR 312. We have specific qualifications based on education, training and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Significant Assumptions

Certain significant assumptions regarding any site that is the subject of an ESA can be made. For instance, a vent pipe on the side of a building could indicate the current or past presence of an underground storage tank. Another example may be that sprayed on insulation on steel beams in a 1968 vintage building may contain asbestos.

Based on all documents reviewed, interviews with knowledgeable people and a site reconnaissance, the following significant assumptions can be made regarding the subject property:

- Unless obviously inaccurate or if information exists to the contrary, SCS Engineers assumes that information collected during this ESA is accurate and correct. Unless warranted, information collected has not been independently validated as part of this ESA.

Limitations and Exceptions

This investigation focused on potential sources of hazardous substances and petroleum products that could be considered a recognized environmental condition and a liability due to their presence in significant concentrations (e.g., above acceptable limits set by the federal, state or local government) or due to the potential for contamination migration through exposure pathways (e.g., groundwater). Materials that contain substances that are not currently deemed hazardous by the U.S. EPA or the Oregon State Department of Environmental Quality (DEQ) were not considered as part of this study.

Unless specifically included in our scope of services, consideration of building materials such as asbestos,

lead-based paint, water supply plumbing, urea formaldehyde, and pressure-treated lumber are not considered in this report, nor are building issues such as fire safety, indoor air quality, mold, or similar matters. We did not evaluate the site for compliance with land use, zoning, wetlands, or similar laws. This report is not intended to be an environmental compliance audit.

Hazardous substances occurring naturally in plants, soils, and rocks (e.g., heavy metals, naturally occurring asbestos, or radon) are not typically considered in these investigations. Similarly, construction debris (e.g., discarded concrete, asphalt) is not considered unless the observation suggests that hazardous substances are likely to be present in significant concentrations or likely to migrate.

Certain other limitations could affect the accuracy and completeness of this report, as follows:

- Subject Property Access Limitations— None
- Physical Obstructions to Observations— None
- Outstanding Information Requests—None
- Historical Data Sources Failure—None
- Other—The findings and conclusions of this ESA are based on visual observations, record reviews, and interviews. Wetland delineation was not performed during this investigation. Soil, groundwater, air, and building materials were not sampled during the assessment. A potential always remains for the presence of unknown, unidentified, or unforeseen surface or subsurface contamination. Also, this ESA is not a regulatory compliance audit, nor a fire safety audit

2. SITE DESCRIPTION

Location

The Swan Island Lease Property located in Multnomah County, Oregon (Figure 1). The property is situated on the south-central portion of Swan Island. For the purpose of this Phase I ESA, the property is considered to be oriented east to west.

The site overview below provides additional description of the location, ownership and other details regarding the subject property.

Site Overview

Address	North Channel Avenue, Portland, Oregon 97217
Current Ownership	Port of Portland (Refs.1, 2).
Land Area	A roughly rectangular parcel of land consisting of approximately 25 acres will be leased by Rinker Materials (Refs.1, 2).
Improvements	The subject property is currently vacant. The 5-acre Main Parking Area at the western end of the subject property is asphalt paved (Refs.1, 2).
Construction Date and Additions	No buildings are currently present on the property.
Current Tenant and Premise Use	Portions of the subject property are currently used for overflow parking of newly-built Freightliner trucks. The paved Main Parking Lot area on the west end of the site is used for employee parking by Cascade General. The remaining portions of the site are largely vacant. (Refs. 1, 2).
Past Tenants and Prior Site Use	<p>The subject property was undeveloped prior to 1926. The property was part of the southern-most runway at old Portland Municipal Airport (circa 1926 through 1941). Between 1942 and 1978, portions of the site were used for rail spurs, material receiving and storage, and a pre-cast concrete construction area. The Atlantic Richfield Company (ARCO) used the site for construction of modular, steel oil-processing units from 1986 and 1990. (Refs.1, 12, 13).</p> <p>The western 5-acre parcel was has been used as a employee parking area since 1978. During the 1940's this area was reportedly used by the Kaiser Company for the construction of ship's boilers. (Refs.1, 12, 13).</p>

Site and Vicinity General Characteristics

The proposed Swan Island lease property is located within the northeast quarter of Section 20, Township 1 North, Range 1 East in northwest Oregon. The subject property consists of a roughly-rectangular parcel of shorefront and upland situated on the southwest end of the Portland Shipyard (PSY). The PSY is located in North Portland on Swan Island. The PSY is situated between Swan Island Lagoon to the north

and the Willamette River to the south. Numerous industrial operations, primarily ship maintenance/repair and heavy equipment fabrication, have operated at the PSY. In addition, much of the land surface that currently comprises Swan Island consists of historic river dredging spoils and imported fill.

The proposed lease consists of two contiguous PSY parcels; the Main Parking Lot (MPL) and the western portion of the North Channel Avenue Fabrication Site (NCFS). The MPL consist of a wedge-shaped, 5-acre lot located near the main entrance to the PSY. The area is currently paved with asphalt and is used for vehicle parking. The NCFS is a long, rectangular parcel that is situated immediately west of the MPL. The NCFS is largely unpaved, with gravel, compact sand and vegetated surfaces. The proposed lease property includes all of the MPL and the northwest 20-acres of the NCFS. The southern borders of the combined 25-acre parcel extends from Channel Avenue (northern border) to the north shoreline of the Willamette River (near the southern border). Photographs of the subject property are provided in Appendix C.

Current Use of the Site

Currently, the majority of the property is vacant or used for vehicle parking. The western 5-acres of the proposed lease (the MPL parcel) is currently leased to the current PSY operator, Cascade General, for employee parking. The remaining portion of the subject property is largely vacant with the exception of the overflow parking of new Freightliner trucks on the northwest and south central parts of the NCFS parcel.

Any observed evidence of hazardous materials use or hazardous waste generation is discussed in Section 5, Site Reconnaissance.

Description of Structures, Roads, Other Improvements on Site

With the exception of a small, watchman's tower located in the eastern end of the MPL parcel, no permanent standing structures are present on the subject property. The tower is an open-sided, wood and concrete structure, and is currently not in use (Ref 1).

The 5-acre MPL parcel is paved with asphalt. The 20-acre NCFS parcel is largely unpaved and primarily covered with gravel and compact sand. Several long, narrow, concrete pads run diagonal across the eastern end of the NCFS parcel. These were reported to have formerly used by ACRO to store sandblasting materials and outdoor equipment.

Both the MPL and NCFS parcels are proved with perimeter fencing. Landscaping is present along the Channel Avenue corridor.

Structures

With the exception of the MPL watchman's tower, no buildings are present on the subject property.

Roads

The subject property is accessed from North Channel Avenue along the northern boundary of the MPL and NCFS parcels. Several gates provide entry/egress to the property through the northern perimeter fencing.

Utilities

Utility systems providing service to the subject property were identified as follows:

Electricity and Gas

Electricity is provided to the subject property by Portland General Electric (PGE). A single ground-mounted transformer and electrical box is located along the northern property line near the center of the NCFS parcel. The unit was labeled as being free of poly-chlorinated biphenyls (i.e. "PCB free").

No natural gas utilities were observed on the subject property. However, Port staff indicated unknown subsurface utilities may exist (Refs 1, 2).

Potable Water Supply

Potable water is supplied to Swan Island through the City of Portland's municipal water system. (Ref. 1)

Sewage Disposal System

No waste water discharges are currently generated at the subject property. Municipal sewer lines are accessible along the Channel Avenue corridor (Ref. 1).

Storm Water System

Eight storm water catch basins are situated along the southern end of the MPL parcel. These catch basins connect to a storm water line that discharges along the Willamette River shoreline near the southwest corner of the NCFS parcel. Although no operating storm water catch basins are present on the NCFS parcel, several suspected old surface drains and discharge pipes (possibly associated with past site tenants) were observed on the parcel during the site inspection.

Current Use of Adjoining Properties

The current use of the adjoining properties to the subject property was identified through an exterior survey of the surrounding area. Photographs showing adjoining facilities can be found in Appendix C of this report.

Generally, example items of environmental concerns that were assessed are those listed in Section 5 of this report. Any items of environmental concern noted below were obvious and readily apparent during the exterior survey of adjoining facilities. There may be additional concerns that were not obvious or readily apparent during the exterior survey that could have a potential environmental impact on the subject property.

The subject property is located in an area characterized by light to heavy manufacturing and industrial land use. Immediate neighbors include:

North: The property is bordered to the north by Channel Avenue. Several industrial/commercial facilities, including Freightliner, Inc., Richland Home Wares, CH Murphy and Indoor Billboard are located further to the north across Channel Avenue.

East: The eastern third of the NCFS parcel (the area immediately adjacent to the proposed lease) is a vacant, unpaved area. Office buildings and outdoor truck parking for Freightliner, Inc. are located further to the east (Ref. 1).

South: The property is bordered to the south by the Willamette River shoreline and Port of Portland right-of-way.

West: The active portions of the Portland Ship Yard, primarily the operations of Cascade General (a ship repair/building business), are situated immediately west of the site (Ref. 1). These operations include several large office/fabrication buildings, dry docks and marine cranes.

3. USER PROVIDED INFORMATION

Many times the representatives of the company requesting the ESA or individuals otherwise associated with the property have knowledge and information that may be indicative of a recognized environmental condition at the subject property. Pursuant to ASTM Standard E 1527-00 and the draft AAI standard, Mr. David Lampe of Rinker Materials, and Mr. Joe Mollusky (Real Estate Manager) and Mr. Don Pettit (Environmental Manger) of the Port of Portland, were contacted regarding the areas of potential concern noted below. The following information was provided to SCS Engineers prior to or during this ESA:

Title Records

Interviews with Mr. Joe Mollusky and Mr. Don Pettit of the Port of Portland indicated that the Port has always owned the area in the vicinity of the Rinker lease property since much of the Swan Island land surface was created as part of the Port's early-1920s dredge-fill operations (Refs, 1, 2). The Port reportedly purchased Swan Island (primarily a filled sand bar) from the Swan Island Real Estate Company in January 1922.

Because the Port of Portland has since retained ownership of the subject property, a title search was not deemed necessary for identifying historical titleholders. Title record information was not provided to SCS Engineers by Rinker Materials or the Port of Portland, or requested to be reviewed as part of the scope of work for this ESA (Refs 1, 3).

Environmental Liens of Activity and use Limitation

Mr. Lampe was unaware of any specific environmental liens, deed restrictions, regulatory institutional controls or any other use restriction that may apply to the subject property. However, Mr. Lampe was aware that the Swan Island lease property had been part of the Port of Portland's Portland Ship Yard complex for many years. He was also aware that ARCO historically occupied portions of the site and that the Port of Portland had completed a series of environmental investigations at the PSY in general and at the subject property in particular (Ref. 3).

Specialized Knowledge

Mr. Lampe was contacted regarding any specialized knowledge that he might have regarding potential recognized environmental conditions or other environmental issues that could materially impact the current or future use of the subject property or have an impact on the current real estate transaction. As previously discussed, Mr. Lampe was aware that the subject property was part of the PSY, and that ARCO had previously been a tenant at the site. Mr. Lampe was also aware that the Port had performed several environmental investigations at the site (Ref. 3). Mr. Lampe indicated that the Port would provide information and documents relating to the issues at the subject property. The information from the Port would be accessible under the terms of a confidentiality agreement between Rinker and the Port.

Valuation Reductions for Environmental Issues

Because Rinker Materials intends to lease rather than purchase the property (Refs. 1, 3), no assessment of current property value or corresponding diminishment of property value due to existing environmental conditions was performed as part of this ESA.

Owner, Property Manager and Occupant Information

Contact was made with Mr. Joe Mollusky and Mr. Don Pettit with the Port of Portland for the purpose of collecting any documentation that may suggest that a recognized environmental condition may exist regarding the subject property. The Port of Portland provided numerous documents and environmental reports concerning the PSY and the subject property (discussed in Section 4). Interviews with Mr. Mollusky and Mr. Pettit confirmed that the subject property has always been Port property, and corroborated the site history inferred during the concurrent document review (Refs, 1, 2).

Reason for Performing Phase I

The purpose of the Phase I ESA at the subject property is to ensure that any recognized environmental conditions at the property are identified before Rinker Materials occupies the site. Rinker plans to lease the property from the current owner (Refs. 1, 3). As previously discussed, the proposed lease language from the Port also requires preparing a Phase I ESA consistent with the draft AAI standard.

Other

No additional information or documentation, beyond the information discussed above, was identified or provided regarding the subject property.

4. RECORD REVIEW

Physical Setting Sources

A current U.S. Geological Survey (USGS) 7.5 minute topographical map showing the area on which the subject property is located was reviewed to help evaluate the physical setting of the subject property. Other physical setting sources included available regulatory-agency files for the surrounding properties and general information for the Swan Island area.

Geological Conditions

The geology and hydrogeology of the site was evaluated through a review of available site investigation reports and boring logs from PSY monitoring wells (Refs. 12 through 16). Regional geology in the Portland area is dominated by the Portland Basin tectonic structure (approximately 20 miles wide by 45 miles long). Within this area basin-fill continental sediments (largely Pleistocene) overlie a thick sequence of volcanic rocks. The overlying Pleistocene sediments in the Swan Island area include sand to silt and gravel alluvial deposits with fine sequences of micaceous arkosic sand, silt and clay.

Groundwater Hydrology and Usage

Swan Island is underlain by the Portland Aquifer system, with undifferentiated fine-grained sediments underlain by a consolidated gravel aquifer (Troutdale Gravel Aquifer) being present at the subject property. Unconsolidated sediments, primarily flood deposits of silt, sand, cobbles and boulders, form the uppermost hydrogeologic unit. The top of the Troutdale Gravel Aquifer lies 100 to 200 feet below ground surface.

The boring log from groundwater monitoring well MW-11 (located on the south-central portion of the NCFS parcel) indicates that fine to silty sands are present beneath the site. Local, shallow groundwater was encountered approximately 22 feet below ground surface during well installation effort. Subsequent water table elevation data recorded during 2003 indicated that the depth to groundwater at MW-11 ranged between 27.04 and 32.07 feet bgs. A copy of the well log is provided in Appendix D.

Shallow groundwater flow across the subject property is reported to be southerly towards the Willamette River. A groundwater divide, running northwest-southeast across Swan Island, is suspected to occur immediately north of North Channel Avenue (Refs 12 to 15). As a result, shallow groundwater beneath the adjacent industrial properties to the north of the subject property is anticipated to flow north towards the Swan Island Basin.

Surface Hydrology

The subject property is bordered to the south by the Willamette River. Storm water drainage is discussed above in Section 2.

Topography

The 1961 Portland, Oregon-Washington quadrangle map (photo-revised in 1970 and 1977), a USGS 7.5 minute topographic map showing the subject property, was obtained and reviewed as specified in ASTM E 1527 (Ref. 27). The subject property is located in the northeast quarter of Section 20, Township 1 North, Range 1 East. According to the contour lines on the topographic map, elevation at the subject property is approximately 40 feet above mean sea level

Both the MPL and NCFS parcels are relatively level, with a slight southerly slope to the Willamette River shoreline. The northern bank of the Willamette River is steep, descending approximately 25 feet to the river's surface.

Floodplains

Information from Flood Insurance Rate Maps published by the National Flood Insurance Program, which is administered by the Federal Emergency Management Agency (FEMA), is provided in the EDR Report (Appendix E). According to the FEMA information, the property is located inside the 100 year floodplain elevation.

Standard Environmental Record Sources

Database Search and File Review

Regulatory records were reviewed to obtain information that might identify potential recognized environmental conditions in connection with the subject property or nearby properties. SCS Engineers reviewed U.S. Environmental Protection Agency (EPA) and Oregon Department of Environmental Quality (DEQ) environmental databases obtained through Environmental Data Resources (EDR).

This search was performed in accordance with ASTM approximate minimum search distance for the databases listed below. A copy of the EDR report, dated March 21st, 2005, is included in Appendix E. The EDR report lists the databases searched, the search radii, and the dates the databases were released. Information concerning each database and its relation to the site is discussed in the following section.

- **U.S. EPA National Priority List (NPL)**

The National Priority List (NPL) is a database of uncontrolled or abandoned hazardous waste sites that have been identified for priority remedial actions under the Superfund program. The sites are listed based on a ranking determined by the EPA hazardous ranking system, a model which assesses the relative risk to public health and the environment from hazardous substances identified in the groundwater, surface water, air, and soil. This EPA database lists sites that are currently being remediated or are scheduled for cleanup under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), or Superfund.

- **U.S. EPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)**

The CERCLA Information System (CERCLIS) identifies facilities on the EPA's National Priority List (NPL) of Superfund sites and sites that have been reported to the EPA by state or local agencies as being suspected of a release or threatened release of hazardous substances.

- **CERCLIS No Further Remedial Action Planned report (NFRAP)**

The No Further Action Planned Report (NFRAP), also known as CERCLIS Archives, contains information pertaining to sites that have been removed from the EPA's CERCLIS Database. NFRAP may contain sites where, following an initial investigation, either no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require federal Superfund action or inclusion on the NPL.

- **U.S. EPA Resource Conservation and Recovery Information System (RCRIS) Treatment, Storage, and Disposal Facilities**

The EPA Resource Conservation and Recovery Information System also identifies the status of registrations, permits, reports, inspections, enforcement activities, and financial data of the facilities regulated under the Resource Conservation and Recovery Act (RCRA). RCRA was enacted to regulate certain facilities that generate, treat, store, transport, and dispose of hazardous substances. Note that EPA eliminated waste codes and waste stream data from the RCRIS database in 1997. Therefore, RCRIS no longer contains information about the types and quantities of regulated hazardous substance at RCRA facilities.

- **Corrective Action (CORRACTS) facilities list**

The Resource Conservation and Recovery Information System (RCRIS) Treatment, Storage, and Disposal Facilities Subject to Corrective Action (CORRACTS) database contains information pertaining to hazardous waste treatment, storage, and disposal (TSD) facilities that have conducted, or are currently conducting, corrective actions as regulated under RCRA. Corrective action may be required beyond the facility's boundary and can be required regardless of when the release occurred.

- **U.S. EPA RCRIS Hazardous Waste Generators Report**

The EPA Resource Conservation and Recovery Information System hazardous waste generators report.

- **U.S. EPA Emergency Response Notification System (ERNS)**

The Emergency Response Notification System (ERNS) serves to store information on oil and hazardous substance releases. Releases are recorded in ERNS when they are initially reported to the Federal Government. ERNS combines data from the National Response Center and the Marine Safety Information System. The ERNS contains records of reported releases from October 1986.

- **Oregon State Department of Environmental Quality Confirmed Release List (CRL)**

The Confirmed Release List (CRL) is the State's inventory of sites where a release has been confirmed. The list is maintained by the Oregon Department of Environmental Quality.

- **Oregon State Department of Environmental Quality Voluntary Cleanup Program (VCP) Sites List**

Oregon State law allows contaminated-site owners or operators to undertake cleanup actions according to applicable laws and guidelines but without direct oversight by the Department of Environmental Quality. The Oregon Voluntary Cleanup Program (VCP) list includes reports received by the Department of Environmental Quality for such remedial actions.

- **Oregon State Solid Waste Facilities List**

The Oregon State Solid Waste Facilities list includes landfills or solid waste facilities, whether active or inactive.

- **Oregon State Department of Environmental Quality Leaking Underground Storage Tanks (LUSTs) list**

The Department of Environmental Quality's list of leaking underground storage tanks (LUSTs).

- **Oregon State Department of Environmental Quality list of Registered Underground Storage Tanks (USTs)**

The Department of Environmental Quality's list of registered underground storage tanks (USTs).

The EDR search of U.S. EPA and Oregon DEQ environmental databases identified over 50 listed sites (including the subject property) within the ASTM search radii of the subject property. Based on the site-specific database information and SCS Engineers' professional opinion, seven sites were identified as of potential interest to the subject property. Because all the pertinent site information was available through the EDR database and from the Port of Portland archives, SCS determined that no additional document review at Oregon DEQ's Northwest Regional Office was necessary to define potential recognized environmental conditions in connection with the subject property or nearby properties.

The seven sites of potential interest to the subject property include:

File Type	Site Name and Address	Distance and Direction from Subject Property
CERCLIS, OR VCS (Brownfields), UST, LUST	Port of Portland-Ship Repair Yard. T1N, R1E, Sections 17, 18, 20. (Swan Island)	Includes Subject Property.
RCRA-SQG	ACRO c/o Wright Schuchart 5100 N. Channel Avenue Portland, OR	Subject Property.
UST, LUST, RCRA-SQG	TEMP Control Mechanical Co. 4800 N. Channel Avenue Portland, OR	Approximately 0.1 miles north-northeast.
UST	Freightliner Corp. 4747 N. Channel Avenue Portland, OR	Approximately 0.1 miles north-northeast.
UST	C.H. Murphy, Inc. 5565 N Dolphin Street Portland, OR	Approximately 0.1 miles north.
UST	HNF Properties, Inc. 5300 N Dolphin Street Portland, OR	Approximately 0.1 miles north-northeast.
OR UIC	Indoor Billboard 5140 N. Channel Avenue Portland, OR	Approximately 0.1 miles north.

The Portland Ship Yard/Swan Island, on which the subject property located, was identified on the

CERCLIS database. The PSY is within the boundaries of the Portland Harbor Superfund site which encompasses approximately six miles of the Willamette River. The southern boundary of the Portland Harbor Superfund Site starts just south of Swan Island. As part of the agreement between DEQ and EPA, DEQ will be responsible for all upland sites (including Swan Island and the PSY). EPA will be responsible for the sediments in the Willamette River. Documents described below related to environmental issues at the subject property reflect interaction between the Port and DEQ. General information regarding the Portland Harbor Superfund site is provided in Appendix D.

Discussions with the Port staff indicated that the Port considers the sediment issues adjacent to the subject property as comparatively minor and of low priority. Further, the Port staff indicated that Rinker's proposed activities on the lease property would not be affected by the proximity of any known or suspected contaminated sediments in the Willamette River. Based on the Port's position, SCS Engineers did not complete an extensive review of sediment-related issues for the Portland Harbor Superfund site as part of this ESA.

Recently, the PSY has been subdivided into two operable units, which is administrative designation to distinguish separate areas within an identified contaminated site. The areas of greatest environmental concern (Operable Unit 1) are primarily located on the western and northern parts of Swan Island. The subject property is located on Operable Unit 2, which has been determined to be largely free of environmental contamination. In addition, the ARCO small quantity generator listing pertains to their past operations on the NCFS parcel. Detailed information concerning the status of the PSY and the subject property is presented in the following sections of this report.

According to the database report, two underground storage tanks (USTs) were decommissioned at the TEMP Control Mechanical Company in 1989. A site cleanup was reportedly completed in February 1994 to address residual TPH contamination, with site closure following later that year. Similarly, UST removals were reported completed at the C.H. Murphy and HNF Properties sites. A single active UST (a 1000-4,999 gallon capacity diesel tank) is reportedly located on the Freightliner truck facility, immediately northeast of the subject property. No releases or violations have been reported at of this facility. In addition, at the Indoor Billboard facility an old catch basin servicing the facility was reportedly closed/rerouted to improve storm water discharge at the site.

Based on the available regulatory information, except for the adjacent PSY operable unit, none of the adjacent properties are considered a potential threat to the environmental condition of the subject property.

Additional Environmental Record Sources

Previous Environmental Reports and Other Documents

Numerous previous environmental investigations have been conducted at the PSY to evaluate soil, sediment, surface water and groundwater contamination issues related to current and past industrial site operations. The following environmental documents, technical reports and regulatory information was provided by the Port of Portland regarding the subject property

- *Environmental Review, ARCO Alaska, Portland Fabrication Site*, Hahn and Associates, December 8, 1989.
- *Environmental Review, ARCO Alaska, Portland Fabrication Site*, Hahn and Associates, July 24, 1990.
- *Waste Characterization and Disposal Assistance, Port of Portland Shipyard*, Hahn and Associates, January 16, 1995.

- *Intergovernmental Agreement, Port of Portland-Oregon Department of Environmental Quality, June 30, 1998.*
- *1998 Portland Shipyard Upland Sampling Results, CH₂MHill, 1998.*
- *Report on ARCO Alaska Inc., Modular Fabrication Facility Soils Investigation, Hahn and Associates, March 30, 1999.*
- *Pre-Transaction Site Reconnaissance of the Portions of the Portland Shipyard to be Retained by the Port of Portland, Bridgewater Group, July 6, 2000.*
- *Remedial Investigation/Feasibility Study Work Plan for the Portland Shipyard, Bridgewater Group, November 2, 2000.*
- *Phase 1B Work Plan Addendum, Bridgewater Group, July 13, 2001.*
- *Phase 1B and II Soil and Groundwater Sampling Results, Bridgewater Group, June 25, 2002.*
- *Phase 1B and II Soil and Groundwater Sampling Results Comments, Oregon Department of Environmental Quality, September 6, 2002.*
- *Response to September 6, 2002 Oregon DEQ Letter, Hahn and Associates, October 21, 2002.*
- *Phase II Third and Fourth Quarter Groundwater and Low-Flow Sampling Results, Portland Shipyard Remedial Investigation, Bridgewater Group, May 6, 2003.*
- *Phase II Third and Fourth Quarter Groundwater Monitoring Comments, Portland Shipyard Remedial Investigation, Oregon Department of Environmental Quality, August 12, 2003.*
- *2003 Annual Groundwater Monitoring Results, Portland Shipyard Remedial Investigation, Bridgewater Group, July 16, 2004.*
- *Swan Island Upland Facility, North Channel Avenue Fabrication Site – Soil Sampling Plan, Bridgewater Group, October 20, 2004.*
- *North Channel Avenue Fabrication Site – Soil Sampling Plan Comments, Oregon Department of Environmental Quality, November 16, 2004.*
- *Operable Unit 2 Removal Work Plan, Swan Island Upland Facility, Bridgewater Group, February 23, 2005.*
- *North Channel Avenue Fabrication Site – Removal Action Work Plan Comments, Oregon Department of Environmental Quality, March 31, 2005.*
- *Dredging and Filling History Relevant to Swan Island (Work in Progress), Port of Portland, April 5, 2005.*

In addition, the Port of Portland provided several boxes of additional environmental records, aerial photographs and regulatory records relating to historical operations at the PSY. Information specifically pertaining to the Rinker Materials' proposed Swan Island lease property is summarized below.

Due to the voluminous nature of many of the reviewed reference documents, and since many of the documents address the entire PSY rather than solely the subject property, complete copies of all the references documents have not been included in this report. Instead, specific pages or sections of selected documents obtained from the Port are provided in Appendix D. Complete electronic versions of selected documents are provided on the enclosed CD.

Environmental Review, ARCO Alaska, Portland Fabrication Site, Hahn and Associates, December 8, 1989

An environmental review of the NCFS parcel was performed to assess the areas of known or potential environmental concern related to operations of an ARCO Alaska contractor (AAI). The contractor used the facility to fabricate oil production facility modules. The constructed modules were transported by barge to the ARCO facilities in Alaska.

Hazardous wastes generated at the site were manifested under an existing ID number, that was originally registered to Daniel International Corporation/Fluor Corporation for ignitable (DOO1) wastes. AAI was registered as a SQG of non-halogenated solvents (F003 and F005) and ignitable hazardous waste (D001).

The results of the review indicated the presence of petroleum-stained soils near an oil storage area and two fueling areas on the east end of the property, east of the Rinker lease. Removal of the contaminated soil was recommended. Additional recommendations were primarily related to hazardous materials management and record keeping.

Environmental Review, ARCO Alaska, Portland Fabrication Site, Hahn and Associates, July 24, 1990

A site inspection was conducted during July 1990 on behalf of ARCO immediately prior to the termination of their operations on the NCFS parcel. At this time the site inspector reported that although several completed oil modules and other equipment remained onsite, that the majority of the parcel was no longer in use. The petroleum ASTs formerly present at the east end of the former ARCO lease near Building 83 had been removed. However, approximately a dozen drums of oil and paint thinner were still present at the site. Several limited areas of surficial soil staining were reported south and west of Building 83 and near the center of the parcel. In addition, sandblasting grit was observed on the ground surface at several locations along the east-central portion of the site.

The inspector concluded that the observed site contamination (stained soils and sandblast grit) appeared to be surficial and limited in extent. The report indicated that ARCO was planning to properly remove and dispose of the drummed oil/thinner and excess sandblasting grit. It should be noted that most of the issues identified with the former ARCO operations were located on the parcel immediately east of the proposed Rinker lease.

Waste Characterization and Disposal Assistance, Port of Portland Shipyard, Hahn and Associates, January 16, 1995

In October 1993, a sample was collected for a series of waste profiling analyses from an approximately 10 cubic yard pile of yard sweepings/sandblasting grit accumulated near the center of the CAFS parcel. The sample was analyzed for VOCs, TPH, PCBs and TCLP metals. The sample was found to contain 11,000 mg/kg TPH and 7.8 mg/l leachable cadmium. Neither VOCs nor PCBs were detected in the sample. Due to the elevated TCLP cadmium concentration, the soil pile was characterized as a hazardous waste.

Approximately 35,000 pounds of D006 cadmium hazardous waste was removed from the site for offsite disposal during two separate removal events in November 1993 and January 1994. Eight confirmation soil samples were collected from the exposed surface soils that were previously located beneath the waste pile. The collected samples were analyzed for metals. None of the samples were reported to contain leachable metal concentration that exceeded dangerous waste classification limits. No further testing or assessments were conducted.

1998 Portland Shipyard Upland Sampling Results, CH2MHill, June 1998

A soils investigation was completed at the PSY to provide information regarding baseline environmental conditions. A total of 16 soil borings were drilled at the PSY, with two borings (Borings 1 and 7) located on the MPL parcel and four borings (Borings 2 through 6) located on the NCFS parcel. Borings 1, 5, 6 and 7 were located within the proposed Rinker lease area.

Selected soil samples from the NCFS parcel were analyzed for total petroleum hydrocarbons (TPH), polychlorinated biphenyls (PCBs) volatile organic compounds (VOCs) and metals. In addition, TPH, PCBs and metals testing was conducted for the MPL borings. Soil results were presented for shallow (0-2' bgs) and deep (14'-22' bgs) samples from each boring location.

The shallow soil samples collected in from Borings 2, 3, 4 and 6 were reported to contain elevated levels of oil-fraction TPH, ranging between 146 and 3,010 mg/kg. Boring 6, located on the proposed Rinker lease area, contained 773 mg/kg oil TPH at a depth of 0 to 2 feet bgs. Boring 5 did not contain elevated levels of TPH, PCBs, VOCs or metals. Boring 3 was reported to contain 1.2 ug/kg methylene chloride. In addition, 0.133 mg/kg PCB Aroclor 1260 was detected in the shallow soil sample from Boring 4. All the soil sampling results that exceeded EPA Region 9 Preliminary Remediation Goals (PRGs) were detected in the shallow soils.

Intergovernmental Agreement, Port of Portland-Oregon Department of Environmental Quality, June 30, 1998

This agreement provides the framework for future cooperative efforts between the Port and the Oregon Department of Environmental Quality (DEQ) to identify and address environmental issues at the PSY (including the subject property). The document specifics managerial contacts, general requirements, agency responsibilities, public notification requirements and general timeframes for initiating site activities.

Report on ARCO Alaska Inc., Modular Fabrication Facility Soils Investigation, Hahn and Associates, March 30, 1999

Six hand auger borings were located near areas of apparent soil staining at ARCO's petroleum storage area (including two 500-gallon gasoline and diesel ASTs) near Building 83. However, a concrete slab was discovered to underlie the petroleum storage area several inches below the gravel surface. Based on the presence of this slab, all the borings were terminated and no soil samples were submitted for laboratory testing. This area of soil staining (in the vicinity of Building 83) is east of the proposed Rinker lease.

Pre-Transaction Site Reconnaissance of the Portions of the Portland Shipyard to be Retained by the Port of Portland, Bridgewater Group, July 6, 2000

This site reconnaissance was conducted to document changes on portions of the PSY (including the NCFS and MPL parcels) since the 1998 site environmental site evaluation. The MPL was reported to have remained largely unchanged. However significant changes were noted at the NCFS parcel. For the proposed Rinker lease area, these included: the presence of two soil piles (mixed with concrete debris) and a large wood debris pile on the western end of the parcel; sandblasting grit storage bins and open bags and piles of sandblast grit on the southwest end of the site; and petroleum soil staining on the western end of the site. To the east, petroleum staining was observed west and north of Building 83, and along the southern property line.

Remedial Investigation/Feasibility Study Work Plan for the Portland Shipyard, Bridgewater Group, November 2, 2000

This document detailed the proposed additional remedial investigations at the PSY which included 51 boring push-probe soils assessment (referred to as Phase 1A) and a follow-up groundwater investigation involving eight monitoring wells (referred to as Phase IB). A total of 16 push probe borings locations (B-13 to B-29) were to be located within the NCFS parcel. Ten of the NCFS borings (B-13, B-14 and B-19

to B-26) were proposed to be installed within the proposed Rinker lease. Once Phase I work was completed, the Port and DEQ would use this data to develop scope of work for a Phase II remedial investigation to fully assess the nature and extent of soil and groundwater contamination at the site.

Phase 1B Work Plan Addendum, Bridgewater Group, July 13, 2001

This report documented the results of the Phase 1A investigation and proposed a modified Phase 1B work plan. Ten borings (B-13, B-14 and B-19 to B-26) and four surface samples (S-3 to S-6) were located in the proposed lease area. Arsenic was detected in several of these borings (B-21, B-26, S-3 and S-6) at concentrations ranging between 5.5 and 10 mg/kg, which exceeded the Region IX PRG of 1.6 mg/kg for arsenic in industrial soil. Sample S-3 contained the most elevated diesel (380 mg/kg) and oil (1,000 mg/kg) TPH levels reported on the lease property. In addition, low levels of PCBs and PAHs were also noted at several locations on the property. Most of the contaminant detections were restricted to surface or near surface soils.

Groundwater was collected from one boring on the lease property (B-13). VOCs and butyl tin were not detected in this sample. However, several total metals, including arsenic, cadmium, chromium, copper, lead, mercury and zinc, were reported to exceed Region IX groundwater PRGs or federal MCLs.

As part of Phase 1B, several additional surface sampling locations and one additional groundwater monitoring well (located on the NCFS) were proposed.

Phase 1B and II Soil and Groundwater Sampling Results, Bridgewater Group, June 25, 2002

The Phase 1B and II investigations at the PSY included the installation and sampling of one groundwater well (MW-11, located on the lease property) and three additional surface soil samples (S-48 through S-50, off the lease property) on the NCFS parcel. Groundwater collected from MW-11 detected total arsenic (2.1 ug/l), dissolved arsenic (0.5 ug/l), total lead (18.6 ug/l), vinyl chloride (6.5 ug/l) and methyl chloride (1.1 ug/l) at concentrations that exceeded Region IX groundwater PRGs, federal MCLs or freshwater water quality criteria.

Phase 1B and II Soil and Groundwater Sampling Results Comments, Oregon Department of Environmental Quality, September 6, 2002

After reviewing the June 2002 Phase I remedial investigation results, DEQ determined that the objectives of the Phase I soil work were adequately completed. However, due to concerns with respect to the construction and sampling of several of the groundwater monitoring wells, DEQ determined that the Phase 1B work was only partially completed. DEQ stated that Phase II investigative tasks (for the complete delineation of soil and groundwater contamination) had not been addressed.

Response to September 6, 2002 Oregon DEQ Letter, Hahn and Associates, October 21, 2002

Responses by the Port's consultant to DEQ's comments included: improvements to soil descriptions on boring logs; a discussion of water table fluctuations at the site; results of monitoring well redevelopment at several well locations to reduce groundwater sample turbidity; and improvements to the documentation of future groundwater sampling events. Soil boring logs, monitoring well construction details and soil/groundwater field sampling notes were provided with the document.

Phase II Third and Fourth Quarter Groundwater and Low-Flow Sampling Results, Portland Shipyard Remedial Investigation, Bridgewater Group, May 6, 2003

Groundwater data from the 3rd and 4th Quarter Phase II groundwater monitoring events (July and October 2002, respectively) and supplemental December 2002 low-flow groundwater sampling at selected wells are reported in this document. Only one of the PSY groundwater monitoring wells (MW-11) is located on the proposed Rinker lease property. All the remaining PSY wells are situated at presumed cross-gradient locations to the northeast of the NCFS and MPL parcels.

A summary of the groundwater results for MW-11 were reported for all four Phase II sampling quarters (December 2001 and April, July and October 2002). Well MW-11 was not included in the December 2002 low flow sampling. Total arsenic (0.8 to 16.7 ug/l) exceeded Region 9 PRGs/MCLs during all the quarterly events. Total lead (18.5 ug/l) exceeded PRGs/MCLs during the April 2002 event. Total copper, silver, lead and zinc also consistently exceeded freshwater aquatic water quality criteria (WQC). Dissolved metals analysis (only performed at MW-11 during the October 2002 event) reported 0.5 ug/l dissolved arsenic which exceeded the arsenic human health WQC.

VOC analysis detected elevated levels of vinyl chloride (ranging between 1.3 and 6.2 ug/l) in MW-11 during each the monitoring events. In addition, a single chloroform detection (1.1 ug/l) was reported in MW-11 during the April 2002 event. Neither tri-n-butyl tin or PAH analysis detected elevated levels of these parameters in MW-11 during the Phase II reporting period.

Phase II Third and Fourth Quarter Groundwater Monitoring Comments, Portland Shipyard Remedial Investigation, Oregon Department of Environmental Quality, August 12, 2003

After reviewing the Phase II quarterly groundwater monitoring results, DEQ suggested that groundwater monitoring be continued at a reduced scope and frequency. For MW-11, the sampling frequency would be reduced to a single annual event during seasonal low water conditions (September). Groundwater samples from this well would only be analyzed for total metals. Further sampling for vinyl chloride was not required by DEQ at MW-11.

2003 Annual Groundwater Monitoring Results, Portland Shipyard Remedial Investigation, Bridgewater Group, July 16, 2004

Annual groundwater monitoring was conducted at the PSY during August 2003. Groundwater samples collected from MW-11 were tested for total metals. Total arsenic (2.2 ug/L) was reported to exceed PRGs/MCL. Water table elevation data recorded during 2003 indicated that the depth to groundwater at MW-11 ranged between 27.04 and 32.07 feet bgs.

Swan Island Upland Facility, North Channel Avenue Fabrication Site – Soil Sampling Plan, Bridgewater Group, October 20, 2004

This sampling plan described planned additional soil investigations around six suspected “hot spots” identified on the north NCFS parcel during the Phase I remedial investigation. Two of the suspected “hot spots” are situated on the proposed Rinker lease near the B-14 and B-23 soil sampling locations located in the central portions of the proposed lease property. The chemicals of concern are identified as mercury in the B-14 area and mercury and PAHs in the B-23 area.

Hand auger sampling to a maximum depth of 4 feet bgs is proposed at three locations around each of the six identified “hot-spots” to define the vertical and lateral extent of the soil contamination. Soil samples are to be obtained at 2 and 4 feet bgs at each location. The soil samples are to be analyzed for each of the site-specific chemicals of concern. The sample results are to be used to direct future soil removal actions.

North Channel Avenue Fabrication Site – Soil Sampling Plan Comments, Oregon Department of

Environmental Quality, November 16, 2004

DEQ's comments to the NCFS parcel soil sampling plan suggested that more restrictive soil criteria (background levels as opposed to PRGs) be used to determine whether "hot spot" soils would need to be excavated and removed. This was to allow for better certainty that ecologically sensitive receptors were being adequately protected. In addition, DEQ indicated it expected that soils sampling and subsequent removals would be completed consistent with its Level II Guidance for Ecological Risk Assessment (ERA). Also, DEQ requested that the storm water system present on the NCFS parcel be better delineated and a description of storm water management at this site be provided.

Operable Unit 2 Removal Work Plan, Swan Island Upland Facility, Bridgewater Group, February 23, 2005.

This remedial work plan details the soil cleanup work to be conducted by the Port of Portland on the PSY Operable Unit 2 (which includes the NCFS) prior to future sale/lease of the property. Soil removals (to a depth of 12 to 24 inches) to address residual metals and PAH contamination will be conducted in the vicinity of sample locations B-28, S-48, S-49 and S-50 (all which are located on the eastern end of the NCFS parcel). No remedial actions were proposed to be conducted to address the two "hotspots" on the proposed Rinker lease.

North Channel Avenue Fabrication Site – Removal Action Work Plan Comments, Oregon Department of Environmental Quality, March 31, 2005.

After reviewing the remedial work plan, DEQ approved the proposed cleanup approach for removal of "hot spots" of residual soil contamination from the eastern portion of Operable Unit 2, outside the proposed Rinker lease property. However, DEQ indicated that the proposed soil remediation did not address their concerns with regard to the ecological risks presented by the remaining areas of the NCFS parcel. This included low-level residual arsenic, copper, lead and zinc levels in the surface soils that continue to exceed ERA Level II Risk Guidelines. DEQ indicated that it expected the Port to assess whether a source control plan needs to be prepared for the parcel to address discharges to the Willamette River.

Discussions with Port staff and the Port's environmental contractor indicate that the planned soil removal action will likely occur in the next few months, subject to further discussions with DEQ.

Dredging and Filling History Relevant to Swan Island (Work in Progress), Port of Portland, April 5, 2005.

This document provides a summary of dredge and fill history at Swan Island. The Corp of Engineers initiated dredge and fill operations at this site in 1868. Annual dredging in the Swan Island area continued through the 1920s, when the Port acquired the property for construction of the Portland Municipal Airport. The Port continued dredge and fill activities throughout Swan Island through 1989. No data concerning the quality or chemical content of the fill materials was included in this document.

Institutional and/or Engineered Site Controls

As required by AAI, an examination was completed of Port of Portland environmental documents for the PSY and the subject property to identify any existing institutional or engineered controls specific to environmental impacts to the site or surrounding properties. No existing institutional or engineering controls of relevance to the subject property were discovered.

However, as discussed above, Oregon DEQ is requiring the Port of Portland to assess ecological and human health risks related to low-level residual arsenic, copper, lead and zinc levels in the surface soils. If the results of this assessment confirms that unacceptable exposure risks to sensitive receptors occur at the site, the Port could potentially be required to implement future institutional or engineered controls along the Willamette River shoreline.

Historical Use Information on the Property

The objective of conducting historical research is to develop a history perspective of the previous use of the property and surrounding areas. This research helps to identify the likelihood that past site use may have led to the development of a recognized environmental condition in connection with the property.

Aerial Photographs

Aerial photographs from the Port of Portland archives and Microsoft's TerraServer internet site (<http://terraserver.microsoft.com>) were reviewed for the purpose of identifying potential past environmental hazards, site uses of environmental concern, cultural changes, and land utilization patterns. Photographs from 2002, 1985 1975, 1967, 1963, 1962, 1943 and 1930 were reviewed for the subject property. Copies of the aerial photographs are included in Appendix D, Historical Research Documents.

The 1930 aerial photograph shows that the subject property was part of the southern-most runway for the old Portland Municipal Airport. With the exception of the concrete runway and a perimeter road paralleling the Willamette River shoreline, the area around the subject property is vacant.

In the 1943 aerial photograph, the Swan Island shipyard is present on the former footprint of the Portland Municipal Airport. The subject property appears to be primarily used for outdoor equipment storage. Several rail spurs appear to extend onto the property. A long, narrow, barracks-like building is located near the northern property border, paralleling modern Channel Avenue.

In the 1962 and 1963 aerial photographs, the property remains largely vacant, with the exception of a single, rectangular building located on the north-central portion of the NCFS. The rail spurs and the barracks-like building that fronted Channel Avenue are no longer visible. A large, hanger-like building is now present immediately east of the subject property. Most of the PSY north-northwest of the subject property appears configured as it is today.

The 1967 aerial photo continues to show little activity at the subject property, with only a few surface features (likely outdoor storage). Both the north-central NCFS building and the large hanger-like building to the east of the site are no longer present. The subject property appears largely unchanged in the 1975 aerial photograph. However, the photograph shows a significant increase in commercial development to the north of Channel Avenue over this period.

Although only the northeast quarter of the subject property is visible in the 1985 aerial photographs, a significant increase in site activity is apparent. Several small buildings and outdoor equipment are now present (including Building 83) related to a concrete operation that reported operated at the site (Ref. 1). A large asphalt-paved parking lot is now visible immediately to the east of the subject property.

The 2002 aerial photograph shows what appears to an aggregate/concrete facility on the central portions of the NCFS parcel. Also, a large vessel is moored immediately south of the NCFS parcel, and loading/unloading operations are likely ongoing at the property. The MPL parcel is paved, and appears to exist similar to its current condition. Overall, an examination of the available historical aerial photographs appears to confirm the anecdotal site history.

Historic Topographic Maps

Historical topographic maps of the USGS Portland Oregon quadrangle were obtained that show the subject property for 1954, 1961, 1970 and 1977. Copies of this historical topographic maps are provided in Appendix D. None of these maps show any buildings located on the subject property. The remaining portions of the PSY show surface structures that corroborated the previously discussed historical aerial photograph review.

Interview with Persons Knowledgeable of the Site History

Mr. Joe Mollusky and Mr. Don Pettit, with the Port of Portland, were interviewed to ascertain the site history. As part of the interview, SCS reviewed the Port of Portland archives for Swan Island and the PSY facility. The Port of Portland reportedly purchased Swan Island in 1922 and subsequently completed an extensive series of dredging and filling operations. Between 1926 and 1941, the Port operated the Portland Municipal Airport on Swan Island. During this period, the airport's southern-most runway ran through the northern portion of the MPL and NCFS parcels (Refs. 1, 2, 11).

From 1942 through 1952, the PSY was leased to the U.S. Maritime Commission in support of the WW II war effort. The Kaiser Company operated a large shipbuilding facility to construct warships at the PSY through 1947. After 1947, the War Assets Administration (the successor to the U.S. Maritime Commission) leased the property to a number of industrial tenants, including steel fabrication, ship dismantling, wood products manufacturing and maritime supply businesses. Beginning in 1950, the Port took over administration of the PSY and conducted further dredging/filling operations and additional industrial site development.

Between 1942 and 1978, the NCFS parcel was an open, graded, unpaved area with railroad spurs that was used for material receiving and storage. A salvage building was reportedly located in the west-central portion of the site. Beginning in 1978, the site was used as a staging and pre-cast concrete construction area. Between 1986 and 1990, the Port leased the NCFS parcel to the Atlantic Richfield Company (ARCO). The site was reportedly used for the construction of modular steel units for oil processing on Alaska's North Slope. During this period, ARCO constructed former Buildings 81 and 83. Building 81, which is located on the proposed Rinker lease, was built as a portable fire shed (that subsequently housed the Shipyard University). The majority of ARCO's historical operations reportedly occurred on the western-most third of the parcel. Building 81, which was formerly located on the proposed Rinker lease, was subsequently demolished (Refs 1, 2).

The Port constructed the MPL on the south west end of the PSY in 1977. The site was graded and paved with asphalt. Kaiser Company site plans reportedly showed that during WWII this area was previously used for ship boiler fabrication (Ref. 12).

Summary of Site History and Environmental Implications

Based on the information reviewed and interviews conducted, the subject property largely consists of fill and dredge spoils added to the historical Swan Island. The site was formerly part of the old Portland Municipal Airport (through the 1930s'); used for outdoor storage/loading-unloading in support of the PSY (1940s through 1985); for the manufacture of modular oil-production equipment (1986 through 1990); and once again for outdoor storage and concrete castings (1991 to current). The MPL parcel was largely vacant until the development of the existing employee parking facility in the 1970s.

The available information regarding the past use of the subject property indicates that industrial activities occurred on and adjacent to the NCFS and MPL parcels. Materials provided by the Port indicated that

generally low-level contamination exists in limited areas of the subject property. The Port continues activities to address the contamination issues in concert with DEQ. However, the historical activities and the available environmental information are not considered to currently represent a threat to the environmental condition of the subject property for the purposes of the propose Rinker lease.

Historical Use Information on Adjoining Properties

Historical uses of the adjoining properties were identified through historical record review including the historical aerial photographs and topographic maps. As previously described, the entire Swan Island area was formerly part of the Portland Municipal Airport. Just prior to the onset of World War II, Swan Island was largely converted to a ship building/repair facility that eventually developed into the Portland Ship Yard.

During the 1940s and again in the 1970's a pulse of commercial development was apparent to the north and west of Channel Avenue in the available historical aerial photographs and topographic maps. Few significant changes in land use were noted south of the subject property, along the north Willamette shoreline. Based on the historical reference sources reviewed for past use of adjoining properties, no uses of environmental concern to the subject property were noted.

5. SITE RECONNAISSANCE

Methodology and Limiting Conditions

The general methods used and any limitations to this ESA are discussed in Section 1 of this report. SCS Engineers was afforded free access to the subject property. There were no specific limitations or special methods required for the reconnaissance of the subject property.

General Site Setting

The objective of the site reconnaissance is to obtain information indicating the likelihood of identifying recognized environmental conditions and other non-scope conditions in connection with the subject property.

On April 6, 2005, Mr. Daniel Venchiarutti and Mr. Gregory Helland of SCS Engineers performed a site reconnaissance to assess areas of the subject property for evidence of obvious or suspected hazardous substance contamination. Evidence of potential contamination includes items such as stained soils, dying vegetation, exposed trash, fill ports or vent pipes from underground storage tanks, or other similar signs. The SCS Engineers inspectors were given authorized access to all areas of the subject property and were accompanied during the site visit by Joe Mollusky and Mr. Don Pettit with the Port of Portland. Site photographs are included in Appendix C of this report.

Exterior and Interior Observations

A summary of uses and conditions consistent with ASTM Standard E 1527-00 regarding the subject property is provided below. For each of the uses or conditions identified [X], detailed information is discussed following the summary.

Identified

YES NO

- | | | |
|-------------------------------------|-------------------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Hazardous Substance In Connection with the Subject Property Use |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Petroleum Products In Connection with the Subject Property Use |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Aboveground or Underground Storage Tanks (ASTs/USTs) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Suspect Containers Not In Connection With Subject Property Use |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Electrical or Mechanical Equipment Likely to Contain PCBs |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Interior Stains or Corrosion |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Dry wells, Drains or Sumps |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Wastewater Discharges |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Septic or Sewage Tanks |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Pits, Ponds or Lagoons |

- | | | |
|-------------------------------------|-------------------------------------|---|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Pools of Liquid or Standing Water |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Solid Waste Dumping, Landfills or Suspected Fill Material |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Stained Soil or Pavement, Leaking Pipes and Equipment |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Stressed Vegetation |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Wells |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Odor |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | General Housekeeping |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Other Uses or Conditions of Concern |

Hazardous Substances in Connection with the Subject Property Use

No evidence of current hazardous materials use was observed in connection with the subject property during the site inspection. As previously described, past tenants at the NCSF parcel, specifically ARCO Alaska, formerly used and stored hazardous substances on the property. However, no evidence of environmental impacts related to past hazardous materials use at the property were evident during the site inspection.

Petroleum Products in Connection with the Subject Property Use

Portions of the NCSF parcel and the entire MPL parcel are currently used for parking new Freightliner trucks and Cascade General employee vehicles, respectively. However, no evidence of significant oil releases (such as soil staining or storm water sheens) related to the current vehicle parking activities at the property were observed during the site inspection.

Electrical or Mechanical Equipment Likely to Contain PCBs

Polychlorinated biphenyl (PCBs) are fire-resistant substances primarily used in dielectric or cooling oils of electrical equipment (for example, electrical transformers, capacitors and old fluorescent light fixtures, etc.) PCBs are considered carcinogenic and are a health concern when direct dermal contact or ingestion occurs. In the United States, PCBs have been illegal for manufacture or trade since 1979. Transformers and fluorescent lighting units with ballasts manufactured before 1978 often used PCB-containing dielectric cooling fluids.

Transformers, capacitors, and fluorescent units that do not use PCB-containing oils are generally identified by labels bearing the words "Non PCB." Transformers installed after 1980 are unlikely to contain PCBs.

An inspection for possible PCB containing electrical transformers and related equipment was conducted during the site reconnaissance. A single ground-mounted transformer was observed on the north-central portion of the NCFS parcel. The unit was by labeled by PGE as "PCB-free".

Drywells, Drains, or Sumps

A total of eight storm water catch basins are located along the southern end of the MPL parcel. These catch basins connect to a storm water line that discharges along the Willamette River shoreline near the

southwest corner of the NCFS parcel. Although no operating storm water catch basins are present on the NCFS parcel, several suspected old surface drains and discharge pipes (possibly associated with past site tenants) were observed on the parcel during the site inspection.

Solid Waste Dumping, Landfills, or Suspected Fill Materials

No solid waste dumping, landfills or recent fill material were apparent during the site inspection. As previously discussed, large portions of Swan Island (and the subject property) consist of fill materials historically dredged from the adjacent Willamette River. Although no records specific to the quality or chemical composition of the introduced fill were available, soils data obtained from the site do not suggest elevated levels of environment contaminants are present in the original fill materials (based on existing deep and shallow subsurface soil data). However, low level soil contamination is known to exist in limited areas of the subject property.

Wells

As previously discussed, a single groundwater monitoring well (MW-11) is present on the southern end of the NCFS parcel.

Non-ASTM Items Considered

Section 10 of this report describes a list of non-ASTM items that can be added to an ASTM ESA. Consideration of these items can be elected for inclusion in the scope of work for the ESA by the user of the report for business risk considerations. The list is not all-inclusive and other considerations can be added at the discretion of the user.

During the course of this ESA, SCS Engineers noted the following non-scope item that could affect the current or future use of the subject property.

Asbestos-Containing Building Materials (ACBM)

No buildings are currently present on the subject property.

6. INTERVIEWS

Interviews with knowledgeable parties will many times be a source of information that could indicate the presence of a recognized environmental condition associated with the subject property. Individuals that may have relevant information may include the owner, site manager, site occupants, local governmental officials and others.

Interviews were conducted with persons as noted in the following table. Information reported by interviewed parties is discussed in appropriate sections of the report.

Persons Interviewed

Name	Function	Employer	Date	Phone
Mr. Joe Mollusky	Real Estate Manager	Port of Portland	April 6, 2005	(503) 944-7533
Mr. Don Pettit	Environmental Manager	Port of Portland	April 6, 2005	(503) 240-2236
Mr. Dave Lampe	Manager	Rinker Materials	March 7, 2005	(360) 254-7770
Mr. Stuart Brown	Environmental Consultant	Bridgewater Group	April 13, 2005	(509) 675-5252

7. FINDINGS AND OPINION

The subject property is part of the Portland Ship Yard, located on Swan Island in Portland, Oregon. The site is situated between North Channel Avenue and the Willamette River. Although the subject property is currently vacant or used for vehicle parking, the site has a long history of municipal, commercial and industrial land use.

The subject property includes two contiguous parcels: the 5-acre Main Parking Lot (MPL) and western 20-acres of North Channel Avenue Fabrication Site (NCFS). The MPL is currently paved with asphalt and is used for vehicle parking. The NCFS is a long, rectangular parcel that is unpaved and currently used for overflow parking of new Freightliner trucks.

Available historical information indicates that the subject property was formerly part of the old Portland Municipal Airport (through the 1930s⁷). The site was subsequently used for outdoor storage/loading-unloading in support of the Portland Ship Yard (1940s through 1985), and by ARCO Alaska for the manufacture of modular oil-production equipment (1986 through 1990). After 1990, the site was used for a variety of purposes, including outdoor storage, aggregate/concrete casting and vehicle parking.

The PSY is within the boundaries of the Portland Harbor Superfund site which encompasses approximately six miles of the Willamette River. As part of the agreement between DEQ and EPA, DEQ will be responsible for all upland sites (including Swan Island and the PSY). EPA will be responsible for the sediments in the Willamette River. Discussions with the Port staff indicated that the Port considers the sediment issues adjacent to the subject property as comparatively minor and of low priority. Further, the Port staff indicated that Rinker's proposed activities on the lease property would not be affected by the proximity of any known or suspected contaminated sediments in the Willamette River.

The available information regarding the past use of the subject property indicates that industrial activities occurred on and adjacent to the site, and that a series of environmental investigations were subsequently completed at these locations. The results of the various investigations identified two hot spots on the subject property. The recent communication between the Port and DEQ suggest that the hotspots on the subject property will be managed in place. Additionally, the single groundwater monitoring well on the subject property will be included in an annual groundwater monitoring program. DEQ is only concerned about the presence of metals in the groundwater at this location. No monitoring of the presence of vinyl chloride is being required.

The Port, in concert with DEQ, continues to evaluate and address environmental issues at the subject property. However, these existing conditions are not considered to currently represent a threat to the environmental condition of the subject property for the purpose of the proposed lease. It should be noted, however, that a soil removal is planned in the near future immediately east of the subject property and that additional environmental assessment activities are likely to occur along the Willamette River shoreline (see the following discussion of data gaps)

A search of the available environmental databases identified the subject property and seven additional sites of possible interest within the ASTM search radii of the subject property. The subject property was listed on the databases as a result of its inclusion within the Portland Ship Yard facility and due to the small quality generator status of a former tenant (ARCO Alaska). The available information indicates that none of the nearby listed sites are considered a potential threat to the environmental condition of the subject property.

Identified Data Gaps

According to the draft AAI standard, EPA defines a significant identified data gap as follows:

"A data gap that may affect the ability of an Environmental Professional to determine whether or not there are conditions indicative of a release or threatened release of a hazardous substance on, at, in or to the property can have a significant consequence regarding a prospective landowner's ultimate ability to claim protection from CERCLA liability."

The following significant data gaps were identified during the ESA that have a potential for impacting the future use of the subject property:

- Four quarters of groundwater monitoring at MW-11 (located on the south end of the NCFS parcel) completed between December 2001 and October 2002 consistently detected vinyl chloride at concentrations ranging between 1.3 and 6.2 ug/l. In August 2003, DEQ determined that VOC monitoring was no longer required at this well location. Because minimal data are available immediately upgradient of MW-11 (a single water sample collected from boring B-13), the source of these vinyl chloride detections remains unknown.

Due to the depth to groundwater (~20 feet bgs) and Rinker Materials' proposed land use, the VOC levels documented in MW-11 are not anticipated to have a negative impact on their lease of subject property. However, in our opinion, the lack of data concerning potential source areas and upgradient VOC levels remains a significant data gap for the property owner.

- Oregon DEQ is requiring the Port of Portland to assess ecological and human health risks related to low-level residual arsenic, copper, lead and zinc levels in the surface soils. If the results of this assessment confirms that unacceptable exposure risks to sensitive receptors occur at the site, the Port could potentially be required to implement future institutional or engineered source control measures along the Willamette River shoreline.

Should such measures become necessary, it is not anticipated that Rinker activities on the uplands portions of the lease would be significantly impacted. However, depending on the scope and scale of a proposed future remedy, the potential for impacts to Rinker's loading/unloading activities along the Willamette River shoreline remains uncertain. This issue should be discussed by Rinker and the Port, and addressed within the lease for the property. The worst case scenario could involve limiting Rinker's loading/unloading activities along the river.

8. CONCLUSIONS

SCS Engineers has completed a Phase I ESA for the subject property. Based on a site reconnaissance, interviews with individuals knowledgeable about the subject property, and a review of regulatory and site documents, no further investigation pertaining to soil or groundwater contamination issues is recommended with regard to Rinker Materials' proposed lease of the subject property.

The available data indicate low level soil and groundwater contamination persists on select areas on the subject property. The contamination represents an existing condition that the Port is obligated to manage. The existing condition is not anticipated to impact Rinker's proposed lease activities on the subject property. However, due to the uncertainties associated with the future source control assessment at the subject property and the adjacent Willamette River shoreline, and the degree to which source control Best Management Practices (BMPs) will be required by DEQ, it is recommended that Rinker Materials include language in their lease assuring Rinker's future access to the shoreline for materials loading and unloading activities.

9. DEVIATIONS

In addition to ASTM standard practice for Phase I site assessments, this report includes the following elements:

- As provision of the lease agreement with Rinker Materials, the Port of Portland specified that the current ESA be prepared to be consistent with the draft “all appropriate inquiry (AAI)” standard; and
- Brief discussions of the potential presence of asbestos-containing building materials are provided with regard to the age of improvements at the subject property. SCS Engineers did not identify any obvious suspect ACBM’s during the site inspection.

10.ADDITIONAL SERVICES

Any additional services contracted for between the user and the environmental professional, including a broader scope of assessment, more detailed conclusions, liability/risk evaluations, recommendation for Phase II testing, remediation techniques, etc., are beyond the scope of this practice, and should only be included in the report if so specified in the terms of engagement between the user and the environmental professional.

ASTM Standard E 1527-00 acknowledges the fact that certain business environmental risks associated with a property's current or planned use could have a material environmental or environmentally-driven impact on the business or real estate transaction.

The assessment of business environmental risks may involve the investigation of several considerations that are outside the normal recognized environmental conditions that are the subject of the ASTM standard practice (non-ASTM). No implication is intended as to the relative importance of inquiry into such non-ASTM considerations. This example list of considerations is not intended to be all-inclusive.

- Asbestos-Containing Materials
- Radon
- Lead-Based Paint
- Lead in Drinking Water
- Wetlands
- Regulatory compliance
- Cultural and historical resources
- Industrial hygiene
- Health and Safety
- Ecological resources
- Endangered species
- Indoor air quality
- High voltage power lines
- Other

11. REFERENCES

Documentation of all sources, records, and resources utilized in conducting the inquiry required by ASTM Standard E 1527-00 (and the draft AAI) and used in assembling this report are either appended to the report or referenced below.

This documentation helps support the findings, opinions and conclusions of this assessment. Also, the documentation will help facilitate the reconstruction of the assessment by an environmental professional other than the environmental professional who conducted this assessment.

The following references and materials were used in assembling this report:

1. Joe Mollusky, Real Estate Manager, Port of Portland. Personal interview. April 6, 2005.
2. Don Pettit, Environmental Project Manager. Port of Portland. Personal interview. April 6, 2005.
3. Dave Lampe, Rinker Materials. Telephone interview. March 8, 2005.
4. Stuart Brown, Bridgewater Group. Telephone interview. April 13, 2005.
5. *Environmental Review, ARCO Alaska, Portland Fabrication Site*, Hahn and Associates, December 8, 1989.
6. *Environmental Review, ARCO Alaska, Portland Fabrication Site*, Hahn and Associates, July 24, 1990.
7. *Waste Characterization and Disposal Assistance, Port of Portland Shipyard*, Hahn and Associates, January 16, 1995.
8. *1998 Portland Shipyard (PSY) Upland Sampling Results*, CH₂MHill, June 1998.
9. *Intergovernmental Agreement, Port of Portland-Oregon Department of Environmental Quality*, June 30, 1998.
10. *Report on ARCO Alaska Inc., Modular Fabrication Facility Soils Investigation*, Hahn and Associates, March 30, 1999.
11. *Pre-Transaction Site Reconnaissance of the Portions of the Portland Shipyard to be Retained by the Port of Portland*, Bridgewater Group, July 6, 2000.
12. *Remedial Investigation/Feasibility Study Work Plan for the Portland Shipyard*, Bridgewater Group, November 2, 2000.
13. *Phase 1B Work Plan Addendum, Portland Shipyard Remedial Investigation*, Bridgewater Group, July 13, 2001.
14. *Phase 1B and II Soil and Groundwater Sampling Results, Portland Shipyard Remedial Investigation*, Bridgewater Group, June 25, 2002.
15. *Phase 1B and II Soil and Groundwater Sampling Results Comments, Oregon Department of Environmental Quality*, September 6, 2002.
16. *Response to September 6, 2002 Oregon DEQ Letter*, Hahn and Associates, October 21, 2002.
17. *Phase II Third and Fourth Quarter Groundwater and Low-Flow Sampling Results, Portland Shipyard Remedial Investigation*, Bridgewater Group, May 6, 2003.
18. *Phase II Third and Fourth Quarter Groundwater Monitoring Comments, Portland Shipyard Remedial Investigation, Oregon Department of Environmental Quality*, August 12, 2003.
19. *2003 Annual Groundwater Monitoring Results, Portland Shipyard Remedial Investigation*, Bridgewater Group, July 16, 2004.
20. *Swan Island Upland Facility, North Channel Avenue Fabrication Site – Soil Sampling Plan*, Bridgewater Group, October 20, 2004.

21. *North Channel Avenue Fabrication Site – Soil Sampling Plan Comments*, Oregon Department of Environmental Quality, November 16, 2004.
22. *Operable Unit 2 Removal Work Plan*, Swan Island Upland Facility, Bridgewater Group, February 23, 2005.
23. *North Channel Avenue Fabrication Site – Removal Action Work Plan Comments*, Oregon Department of Environmental Quality, March 31, 2005.
24. *Dredging and Filling History Relevant to Swan Island (Work in Progress)*, Port of Portland, April 5, 2005.
25. *Geology of Oregon*. Ewart M. Baldwin. 1976, Kendall/Hunt Publishing Company.
26. *Oregon Water Resources Division Well Log Information*, April 2005.
27. *Portland, Oregon 7.5 minute Topographic Quadrangle*, United States Geologic Survey, photo-revised 1984.
28. Aerial photograph review: Port of Portland, April 6, 2005.

12.SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

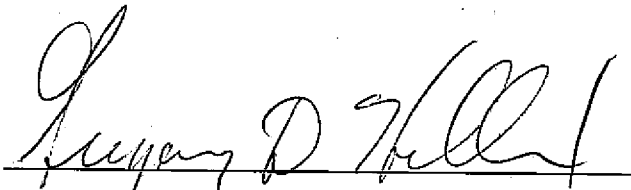
SCS Engineers has performed the Phase I Environmental Site Assessment (ESA) work in accordance with the scope of work of ASTM Standard E 1527-00 and the draft AAJ standard. The work is consistent with general accepted environmental due diligence standards. SCS Engineers declares that to the best of our professional knowledge and belief, these individuals meet the definition of Environmental Professional as defined in §312.10 of 40CFR 312. This ESA was prepared by the undersigned.

I certify that I conducted the ESA or reviewed it and the information presented herein, to the best of my knowledge and belief, is accurate and complete as described.



Daniel A. Venchiarutti, R.G.
Project Manager
SCS ENGINEERS

I certify that I have reviewed this Phase I Environmental Site Assessment.



Gregory D. Helland, R.G.
Project Director
SCS ENGINEERS

13. QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

This Phase I Environmental Site Assessment report of the subject property was prepared by or under the supervision of the following professionals.

DANIEL A. VENCHIARUTTI, R.G.

Education

MS, Geology, University of Iowa, 1987

BS, Biology/Geology, University of New York at Stony Brook, 1983

Professional Licenses

Registered Professional Geologist (RG)—(Oregon, Idaho, Alaska, 1992) (Washington, 2002)

American Institute of Professional Geologists (AIPG) Certification, 1995

Department of Ecology UST Site Assessment and Decommissioner's Supervisor Licenses, 1992

Affiliations

National Water Well Association

Association of Groundwater Scientist and Engineers

Geological Society of America

Society of Economic Geologists

American Association of Professional Geologists

Professional Experience

Mr. Venchiarutti joined SCS in 1990. He has 16 years of experience in the design and management of environmental assessments and site investigations; implementation of soil, soil vapor, sediment and groundwater sampling programs; and site remediation. He is experienced with groundwater modeling and tracking contaminant plumes through a variety of media, and evaluating their impacts on human health and the environment.

Over the years, he has completed numerous due diligence and Phase I assessment projects for public and private clients throughout the Northwest. These assignments require careful analysis and attention-to-detail to achieve correct results. Dan has successfully completed Phase I assessments on such well-known structures as Seattle's Space Needle and the Microsoft University Building. One of his most satisfying projects however, involved a relatively unknown community center that was constructed near the turn of the century. As a result of his assessment, several previously unidentified potential hazards were corrected at this heavily used facility. Selected project experience includes:

Phase I/II Environmental Site Assessment / Investigation

- **Al Bolser Tire, Lynnwood, WA, Phase I Environmental Site Assessment.** A Phase I assessment was conducted by Mr. Venchiarutti at this vehicle maintenance facility, which included evaluation of hazardous materials usage.
- **Space Needle, Seattle, Phase I Assessment.** This project involved an expanded Environmental Site Assessment at a commercial facility for the Space Needle Corporation at the 600-foot high Space Needle tower and surrounding property.
- **Normandy Park Shopping Center Phase I Environmental Site Assessment.** Completed a Phase I property assessment for small shopping center and commercial center located in Normandy Park, Washington.
- **Scandia Apartments Phase I Environmental Site Assessment.** Completed a Phase I assessment of a residential apartment building located in Lynnwood, Washington. The project included limited Phase II sampling of oily surfaces associated with hydraulic fluid leaks in two elevator shafts. SCS also completed a property condition assessment (PCA) also for the property.
- **Leisure Time Resorts Phase I Property Assessments.** Managed and conducted 11 Phase I Assessments in Washington and Oregon at recreational campground resorts operated by Leisure Time Resorts. Project work included site reconnaissance, review of regulatory agency records and historical air photos and interviews with campground managers and other employees. By combining the Phase I results for 11 sites into a single comprehensive report, SCS was able to achieve a significant time and cost savings to our client. SCS was also able to provide the resources and manpower to achieve the accelerated turnaround required by Leisure Time to meet its transaction deadline.
- **Thousand Trail Campgrounds Phase I Update Assessments.** Updated existing Phase I assessments for 11 recreational campground resorts located in Washington and Oregon to facilitate a real estate transaction. Project work included site reconnaissance, review of regulatory agency records and historical air photos and employee interviews. By combining the multiple site updates into a single comprehensive report, SCS was able to achieve a significant time and cost savings to our client.
- **Franklin-Covey Manufacturing Facility Phase I Environmental Site Assessment.** Completed a Phase I property assessment for a 400,000 square foot printing and binding facility located in Salt Lake City, Utah.
- **Waste Management Rainer Yard Phase I Site Assessment.** Completed a Phase I property assessment for a transportation yard located in Tukwila, Washington. The facility was being vacated by Waste Management after being used for five years as a solid waste hauling facility.
- **Microsoft University, Bellevue, WA, Phase I Assessment.** Performed a Phase I Environmental Site Assessment for the Microsoft University Building. The building is currently used as a training facility for software designers. The assessment included an inspection of the premises, review of Department of Ecology records, and interviews with the property owners and maintenance personnel.
- **Department of Wildlife, Phase I Environmental Site Assessments.** Dan performed assessments at two separate properties located in the Yakima Valley River floodplain in Washington. The properties were under consideration for purchase as recreational and wildlife conservation sites.

- **GFI Energy Ventures Transaction Screening.** Participated in multi-facility property assessments and transaction screenings at numerous electronic manufacturing facilities across the northwest and abroad. Project work included site reconnaissance, review of historical and regulatory records and interviews with facility employees. By combining the transaction screening results for all the sites into a single comprehensive report, SCS was able to achieve a significant time and cost savings to our client.
- **Old Union Station Due Diligence.** Participated in a document review and due diligence search for a commercial lot on the northern end of Old Union Station in Seattle, Washington. The lot was formerly occupied by a coal gas plant and was the site of extensive filling. SCS was also able to provide the resources and manpower to achieve the accelerated turnaround required by our client's transaction deadline.
- **Municipality of Metropolitan Seattle (METRO), Seattle, WA, Phase I Assessments.** Mr. Venchiarutti completed several Environmental Site Assessments for METRO at a variety of urban locations, as part of their expansion of Seattle's Park & Ride transportation system. Sites varied from undeveloped land to properties containing industrial uses.
- **Robbins & Company Due Diligence Review.** Conducted a document review and due diligence search for a commercial lot near the southern terminus of Seattle Tacoma Airport. The lot was formerly occupied by a gasoline station and was the site of extensive soil cleanup. SCS was also able to provide the resources and manpower to achieve the accelerated turnaround required by our client's transaction deadline.
- **AMF Bowling, Phase I Environmental Site Assessments.** Completed several due diligence property assessments for commercial bowling centers located in Washington and Oregon. The properties were being acquired by AMF Bowling Worldwide as recreational facilities.
- **ARCO Station Phase I Environmental Site Assessments.** Completed Phase I assessments at four separate ARCO service station properties located in western Washington. The due diligence was required by a national lender prior to the sale of these properties.
- **Alpine Way Retirement Home Phase I Environmental Site Assessment.** Completed a Phase I assessment of a retirement center located in Shelton, Washington.
- **Residential Homeowner Phase I Environmental Site Assessment.** Completed a Phase I assessment for a residential property located in Issaquah, Washington.
- **Marriott Courtyard Hotels, Phase I Environmental Site Assessments.** Completed several due diligence property assessments for hotel properties located in Washington.
- **Summerfield Suites Hotels, Phase I Environmental Site Assessments.** Completed several due diligence property assessments for hotel properties located in Washington and Oregon.
- **Park Heights Building, Phase I Environmental Site Assessment.** Completed a Phase I property assessment for commercial office building located in Bellevue, Washington.
- **Silverdale Square Shopping Center Phase I Environmental Site Assessment.** Completed a Phase I property assessment for small shopping center and commercial center located in Silverdale, Washington.
- **Erickson Avenue Office Park, Phase I Environmental Site Assessment.** Completed a Phase I property assessment for a commercial office park located on Bainbridge Island, Washington.

- **Bales Self Storage, Phase I Environmental Site Assessment.** Completed a Phase I environmental site assessment for commercial storage building located in Renton, Washington.
- **Good Shepherd Center, Phase I Environmental Site Assessment.** Completed a Phase I property assessment for a former school building located in Seattle, Washington. The building consisted of a pre-1900 structure with more recent modifications that included asbestos containing building materials.
- **Rinker, Everett, WA, Phase I/II Environmental Site Assessments.** Mr. Venchiarutti assisted in conducting Phase I and II assessments of a sand and gravel operation that included a concrete batch plant and an asphalt plant. The Phase II investigations included the collection of soil, sediment, surface water and groundwater samples.
- **Department of Wildlife, Whidbey Island, WA, Phase I Environmental Site Assessment with Limited Soil Sampling.** Completed phase I assessment of an estuary within Penn Cove at the former site of a sawmill. Based on an initial inspection, several samples of suspect soils and sediment were tested for contaminants.
- **Manhattan Village Shopping Center, Phase I/II.** Managed a Phase I/II site assessment for a shopping center to assess site contamination prior to a real estate transaction. SCS conducted limited Geoprobe soil and groundwater samples in the vicinity of a dry cleaner and former service station.
- **Hartman/Sheldon Property, Phase I/II.** Managed a Phase I/II site assessment for Genie Industries at a former junkyard to assess site contamination prior to a real estate transaction. SCS constructed 10 test pits and collected eight Geoprobe groundwater samples. After sample analysis revealed several areas of contaminated fill, SCS developed a series of cleanup options to allow the expansion of Genie's manufacturing facilities.
- **Seattle Parks-Greenlake Phase II Assessment.** Managed a Geoprobe site assessment for the Seattle Parks Department to investigate a heating oil release near the southern end of the Greenlake boathouse. The investigation included the installation of approximately 12 soil borings and the collection and analysis of soil and groundwater samples to characterize the extent of the subsurface contamination.
- **Kennametal, Inc., Vancouver, B.C., Phase I/II Environmental Site Assessments.** Conducted both Phase I and Phase II assessments at the Kennametal metals manufacturing facility. Based on the findings of the Phase I work, a series of soil borings and groundwater monitoring wells were installed at the facility and groundwater sampling was performed to assess the potential for the off-site migration of dissolved heavy metals and associated contaminants.
- **U.S. West Company, Phase I/II Environmental Site Assessments.** Responsible for both Phase I and II Environmental Site Assessments at several US West properties containing underground storage tanks (USTs) throughout the Puget Sound region.

GREGORY D. HELLAND, R.G.

Education

B.A., Geology/Distributive Science, Gustavus Adolphus College, 1983

Additional courses: Hydrogeology, Contaminant Hydrogeology

Professional Licenses

Registered Professional Geologist (R.G.) Washington, 2002

Registered Professional Geologist (R.G.) Oregon, 1991

Dept of Ecology UST Site Assessment Registration, 1991

Dept of Ecology UST Decommissioning Supervisor License, 1992

Professional Affiliations

Association of Ground Water Scientists and Engineers

National Groundwater Association

Northwest Geological Society

Washington Hydrological Society

Professional Experience

Mr. Helland joined SCS in 1986. He has over 16 years of management and project experience related to environmental monitoring, hazardous waste characterization, remediation and management, permitting, and human health and ecological risk assessment.

Mr. Helland has managed multiple investigations and assessments, performed UST removals and cleanups, and has managed numerous property transfer projects. He has overseen and managed the installation of groundwater monitoring wells through refuse, and the installation of landfill gas extraction systems. He has designed the groundwater monitoring system for inactive landfills, a regional soil treatment facility, gravel and hard rock mining operations, and petroleum contaminated sites.

Additionally, Mr. Helland has managed a number of RI/FS projects, including a highly publicized Commencement Bay project at Ruston Way in Tacoma, Washington. The site was the subject of a soil, soil vapor, sediment and groundwater investigation to determine the impacts from 80 years of industrial use of the property. Groundwater quality information was used to evaluate the potential ecological risks from the groundwater discharge to the adjacent marine waters. Specific experience includes:

Phase I/II Environmental Site Assessment / Investigation

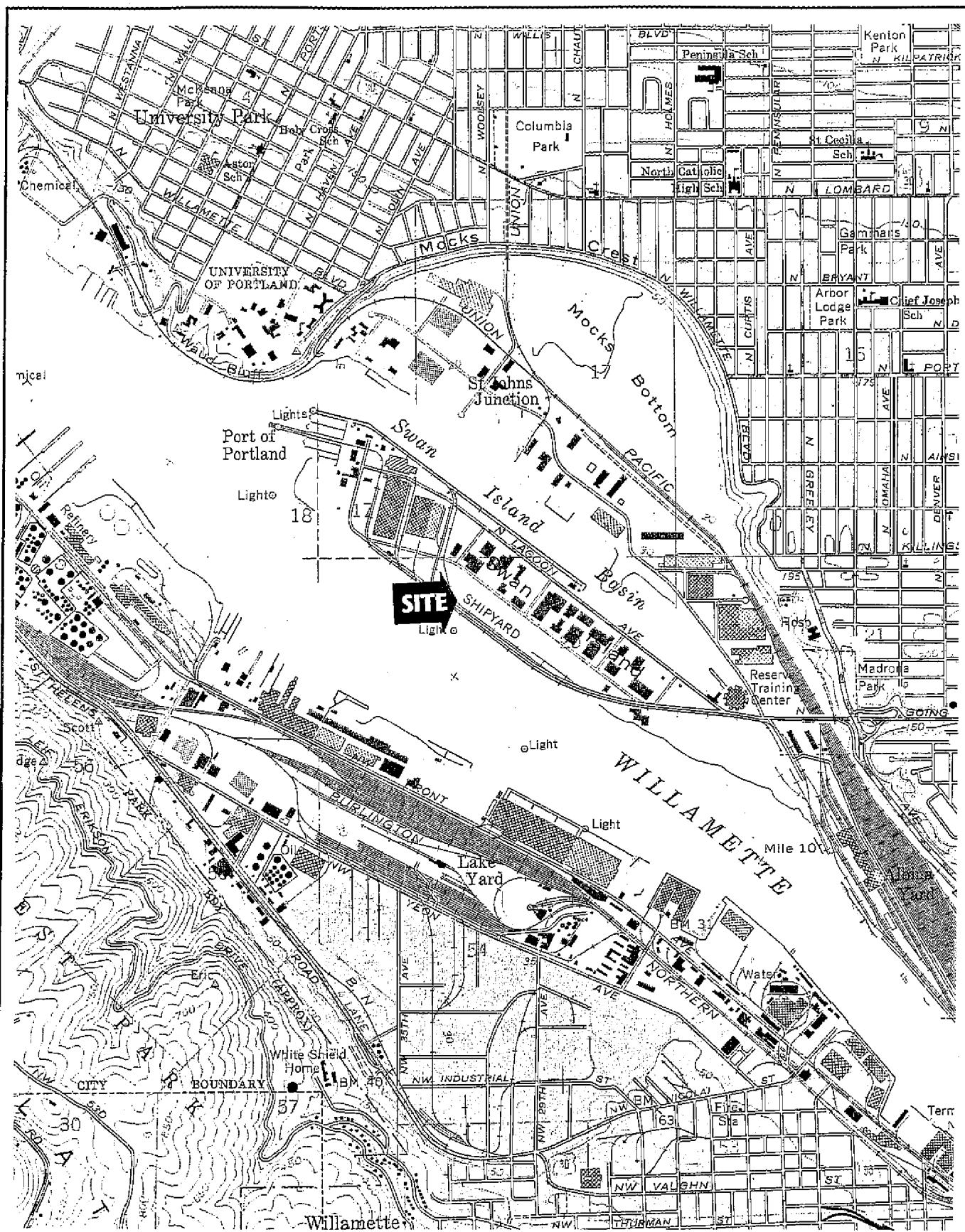
- **AMF Bowling, Phase I Environmental Site Assessments.** Project Manager for several due diligence property assessments for commercial bowling centers located in Washington and Oregon. The properties were being acquired by AMF Bowling Worldwide as recreational facilities.
- **ARCO Station Phase I Environmental Site Assessments.** Project Manager for Phase I assessments at four separate ARCO service station properties located in western Washington. The due diligence was required by a national lender prior to the sale of these properties.
- **Camp Zama Motor Pool PA/SI, Japan.** Project Manager for a preliminary assessment with site characterization at a motor pool facility at Camp Zama, Japan. The investigation involved an initial site inspection followed by the installation of soil borings and collection of subsurface soil samples. The study characterized the vertical and horizontal extent of long-term releases from several underground diesel storage tanks.
- **Confidential Client Site Assessments.** Conducted multiple real estate preconveyance assessments that included site inspection and drilling programs to identify potential hazardous waste conditions at commercial and industrial properties prior to transfer of ownership.
- **GFI Energy Ventures Transaction Screening.** Managed multi-facility property assessments and transaction screenings at numerous electronic manufacturing facilities across the northwest and abroad. Project work included site reconnaissance, review of historical and regulatory records and interviews with facility employees. By combining the transaction screening results for all the sites into a single comprehensive report, SCS was able to achieve a significant time and cost savings to our client.
- **Leisure Time Resorts Phase I Property Assessments.** Project Director for 11 Phase I Assessments in Washington and Oregon at recreational campground resorts operated by Leisure Time Resorts. Project work included site reconnaissance, review of regulatory agency records and historical air photos and interviews with campground managers and other employees. By combining the Phase I results for 11 sites into a single comprehensive report, SCS was able to achieve a significant time and cost savings to our client. SCS was also able to provide the resources and manpower to achieve the accelerated turnaround required by Leisure Time to meet its transaction deadline.
- **Marriott Courtyard Hotels, Phase I Environmental Site Assessments.** Managed several due diligence property assessments for existing and proposed hotel properties located in Washington.
- **Municipality of Metropolitan Seattle (METRO), Seattle, WA, Phase I Assessments.** Managed several Environmental Site Assessments for METRO at a variety of urban locations, as part of their expansion of Seattle's Park & Ride transportation system. Sites varied from undeveloped land to properties containing industrial uses.
- **Robbins & Company Due Diligence Review, SeaTac, WA.** Managed a document review and due diligence search for a commercial lot near the southern terminus of Seattle Tacoma Airport. The lot was formerly occupied by a gasoline station and was the site of extensive soil cleanup. SCS was also able to provide the resources and manpower to achieve the accelerated turnaround required by our client's transaction deadline.
- **Summerfield Suites Hotels, Phase I Environmental Site Assessments.** Managed several due diligence property assessments for existing and proposed hotel properties located in Washington and Oregon.

- **U.S. Military Base Ordnance Area Assessments, Japan.** Managed Preliminary Assessments with Site Characterizations (PA/SI), including detailed soil sampling and human health and environmental risk evaluations, for two separate ordnance open burning/open detonation facilities at active U.S. military bases in Japan. The projects involved additional emphasis on health and safety procedures, including the use of an ordnance expert, during the field activities.
- **University of Washington Motor Pool UST Assessment, Seattle, Washington.** Provided technical assistance and oversight during a preliminary soils investigation and groundwater assessment prior to the planned removal and replacement of six USTs at the UW's motor pool facility. The field data was used to prepare a quantitative scope and cost estimate for addressing the petroleum contaminated soils during the construction activities. Also provided oversight and sampling during the UST removals to support preparation of the UST Closure Report.
- **Washington National Guard Armory, Seattle, Washington.** Project Manager for the Preliminary Assessment/Site Investigation (PA/SI) for the Washington National Guard Armory property in Seattle, Washington. Evaluated current and historic activities at the site and potential impacts from the adjacent rail yard and landfill. Sampled soil and groundwater for the presence of petroleum hydrocarbons, metals, pesticides, PCBs and polycyclic aromatic hydrocarbons, delineated the extent of the free-phase petroleum product at the site, and prepared a summary report.

APPENDICES

Appendix A	Site Vicinity Map
Appendix B	Site Plan
Appendix C	Site Photographs
Appendix D	Historical Research Documents (including selected Port of Portland Archive Documents)
Appendix E	Regulatory Records Documentation

APPENDIX A
SITE VICINITY MAP



SOURCE: USGS

SCS ENGINEERS
 STEARNS, CONRAD AND SCHMIDT
 CONSULTING ENGINEERS, INC.

2405 140TH AVE NE, SUITE 107, BELLEVUE, WA 98005 (425) 746-4600

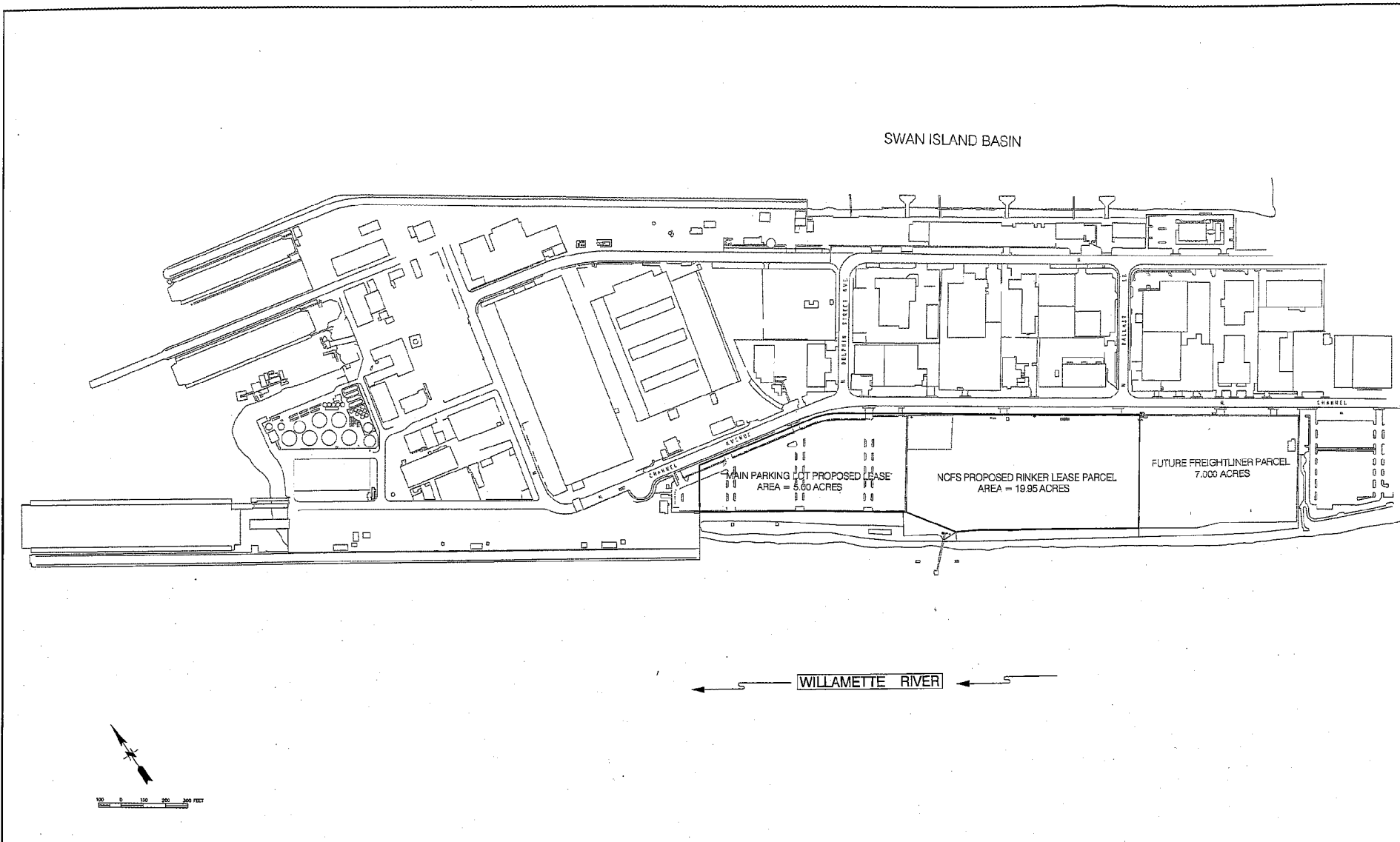
PROJECT NO.	DES BY
04204031.00	D.V.
SCALE	CHK BY
AS SHOWN	D.V.
CAD FILE	APP BY
FIG 1	G.H.

SITE VICINITY MAP
 RINKER SWAN ISLAND LEASE
 PORTLAND, OREGON

DATE
APR 2005
FIGURE
1

APPENDIX B

SITE PLAN



SCS ENGINEERS
 STEARNS, CONRAD AND SCHMIDT
 CONSULTING ENGINEERS
 2405 146TH AVE NE, SUITE 107, BELLEVUE, WA 98005 (425) 746-4600

PROJECT NO.	04204031.00	DES BY	L.L.
SCALE	AS SHOWN	CHE BY	D.V.
CAD FILE	FIG 2	APP BY	G.H.

SITE PLAN
 RINKER SWAN ISLAND LEASE PROPERTY
 PORTLAND, OREGON

DATE	APR 2005
FIGURE	2

PSY500009761

APPENDIX C

SITE PHOTOGRAPHS



Photo 1. View to the west of the 20-acre North Channel Avenue parcel. Note Freightliner new truck overflow parking. (4/6/05)



Photo 2. View to the south (toward the Willamette River) of the North Channel Avenue parcel. (4/6/05)



Photo 3. View to the south showing the Willamette River. The fence defines the southern border of the proposed Rinker lease. (4/6/05)



Photo 4. Groundwater monitoring well (MW-11) which is located along the southern border of the North Channel Avenue parcel.



Photo 5. Suspected former storm water discharge pipe located along the south shoreline immediately outside of the North Channel Avenue lease.



Photo 6. Easterly view along the southern shoreline of North Channel Avenue parcel.



Photo 7. View to the west of the 5-acre Main Parking Area parcel located immediately west of the North Channel Avenue parcel. (4/6/05)



Photo 8. Electrical transformer and utility box located inside the north-central border of the North Channel Avenue parcel. The transformer was labeled “PCB-free”.

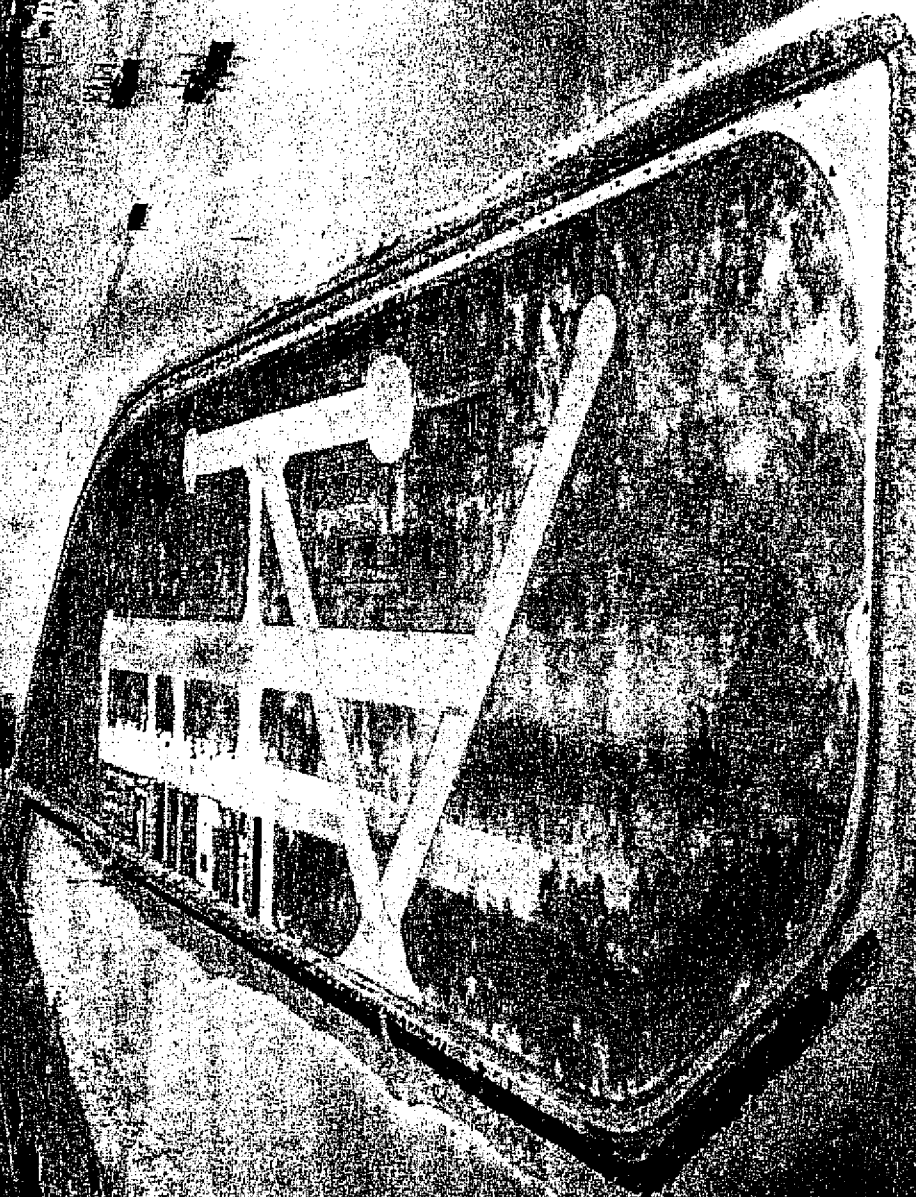
APPENDIX D

HISTORICAL RESEARCH DOCUMENTATION

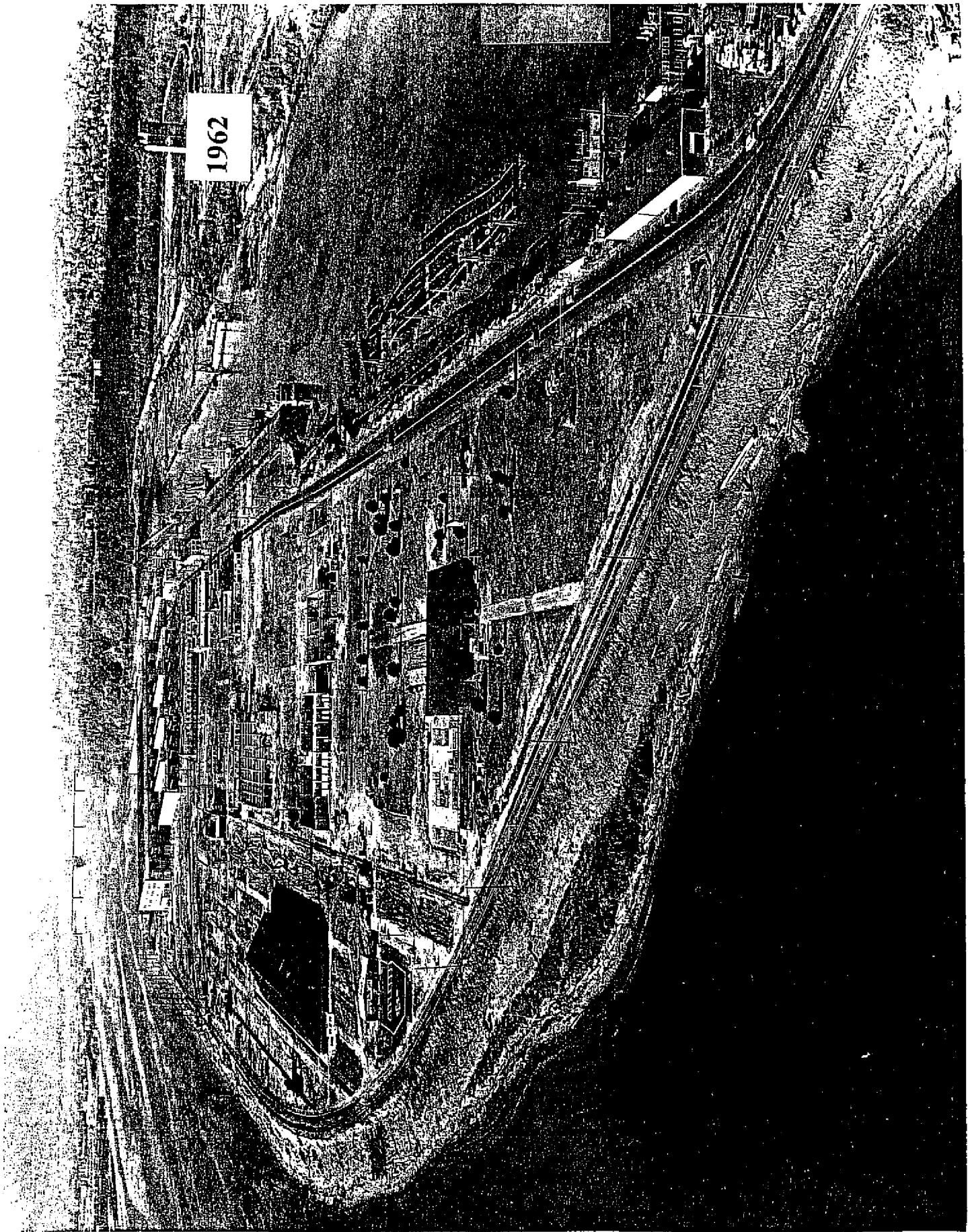
(Including selected Port of Portland Archive Documents)

May 1930

1930



11/1/62

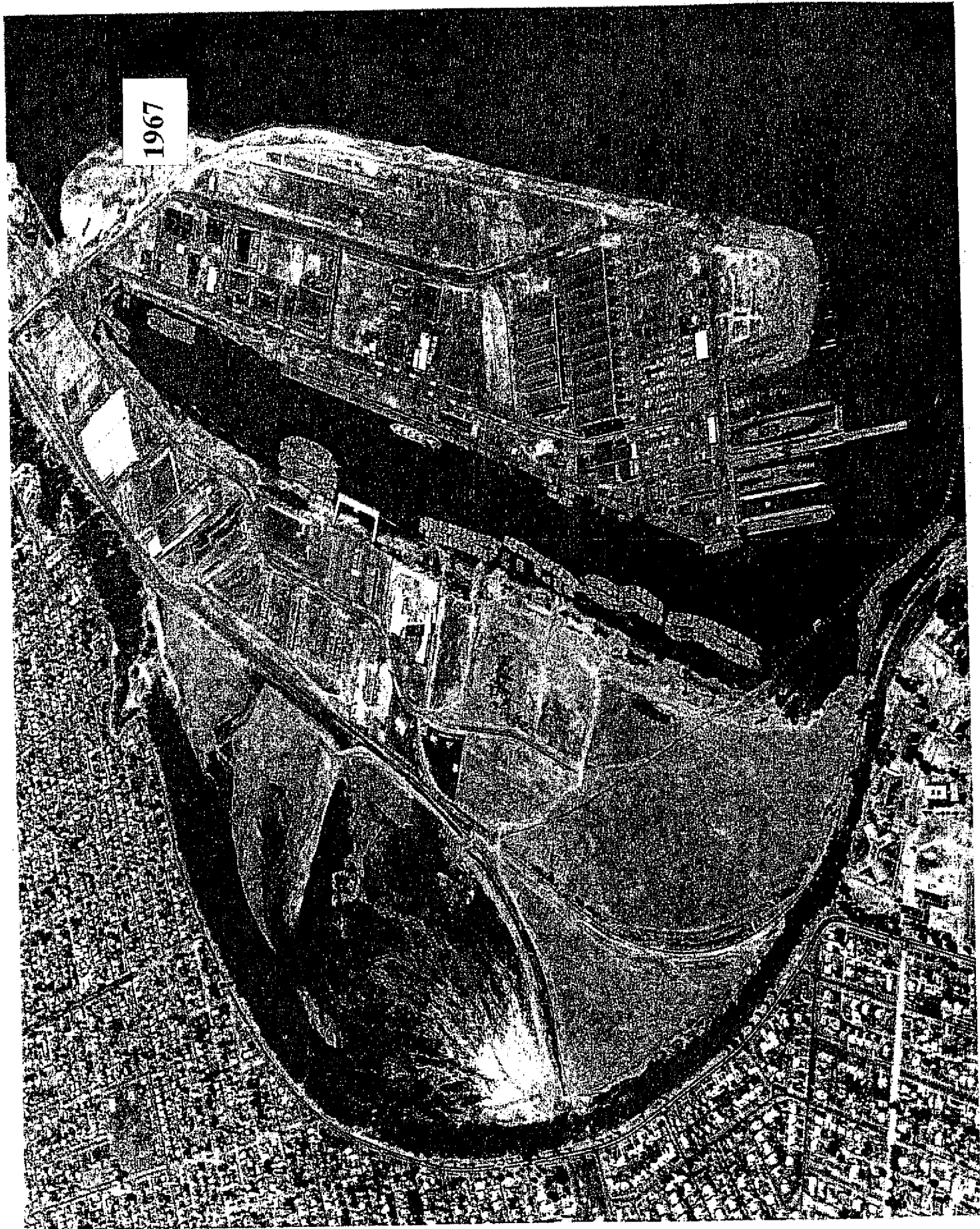


1963

PSY500009770

8/4/67

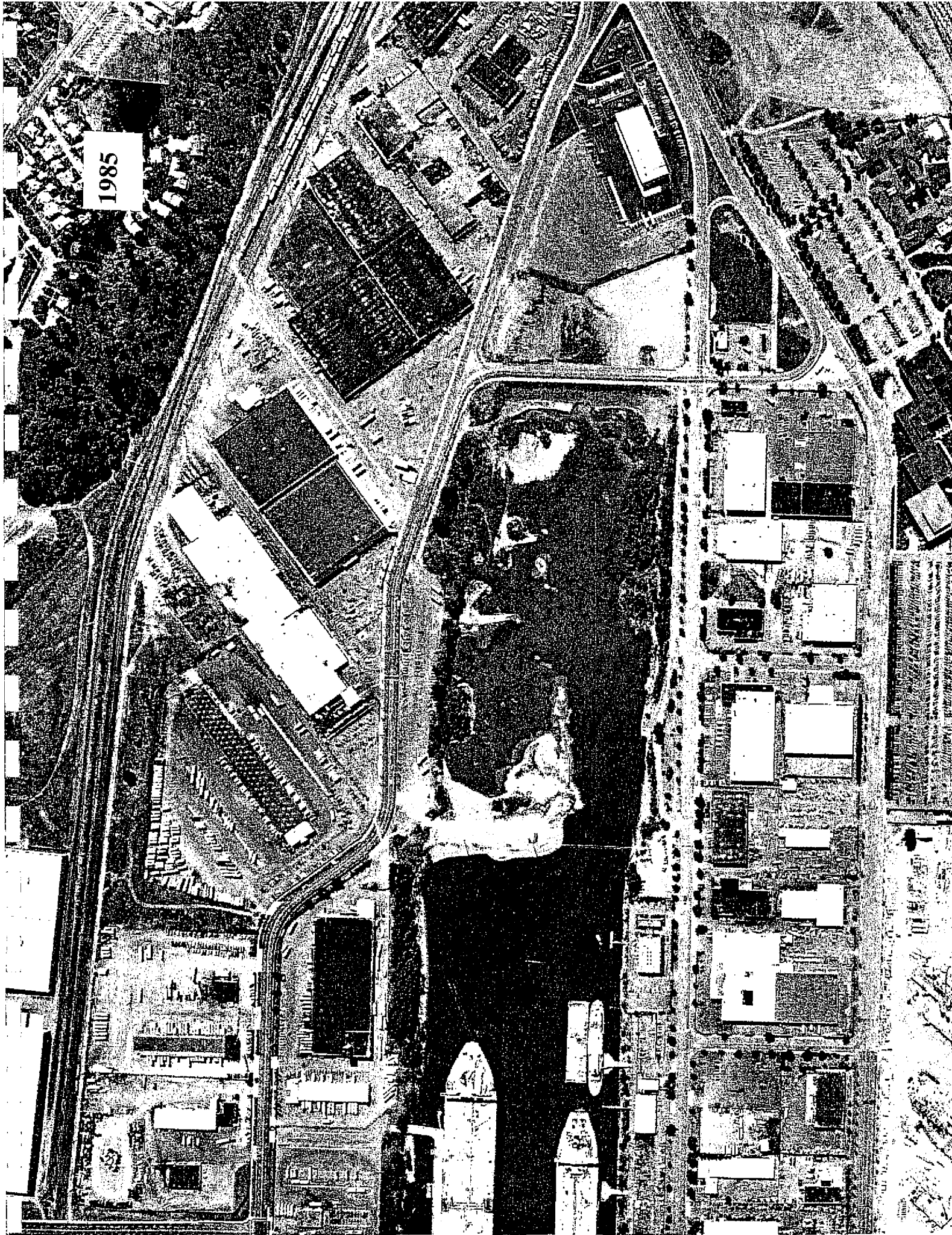
1967



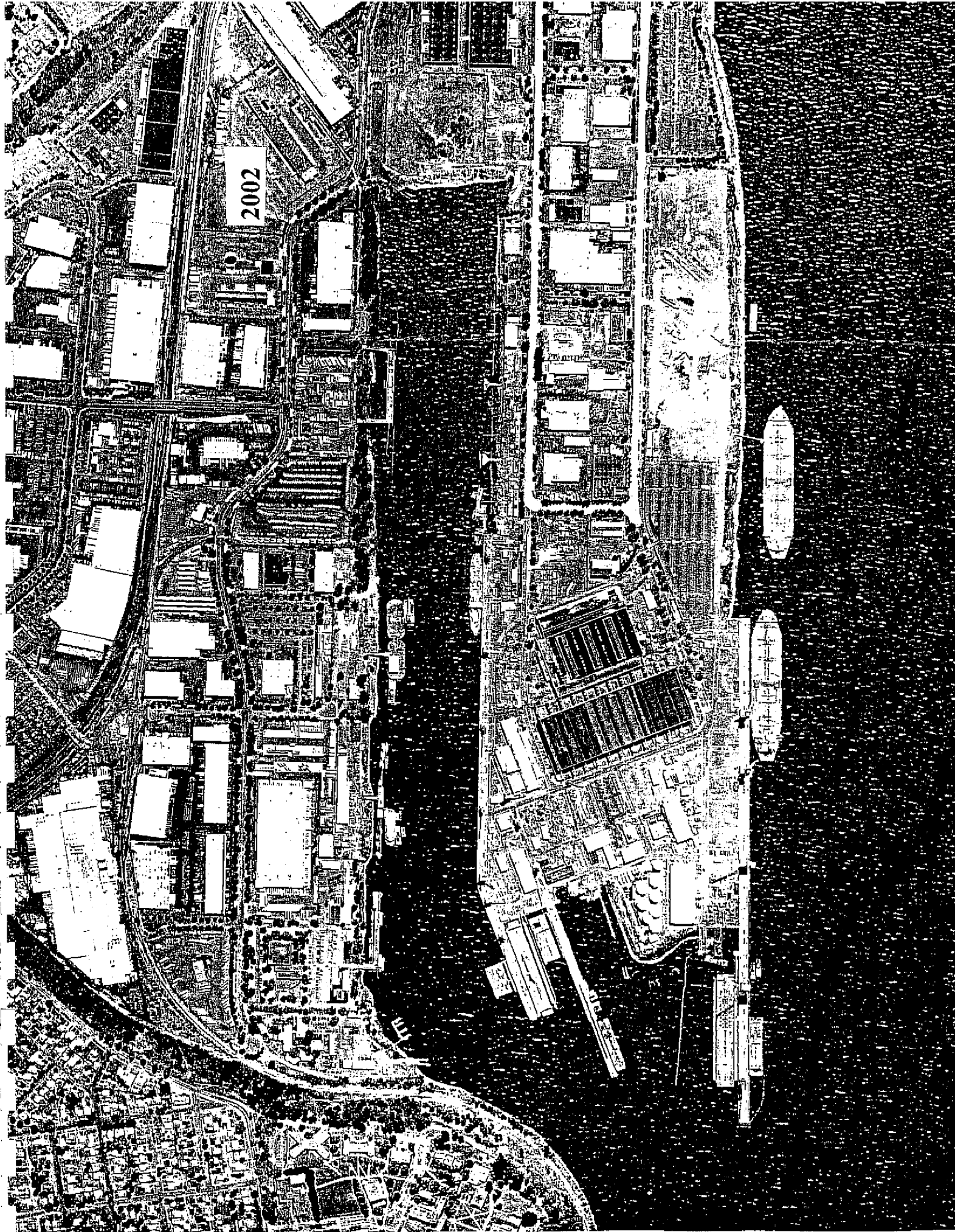


PSY500009772

1985



PSY500009773



PSY500009774



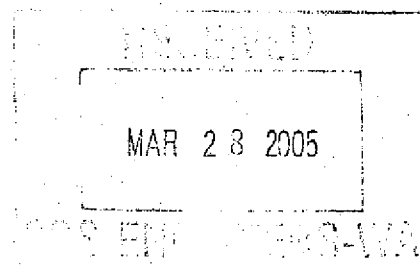
EDR™ Environmental
Data Resources Inc

The EDR-Historical Topographic Map Report

**Swan Island Lease Property
N. Channel Ave
Portland, OR 97217**

March 23, 2005

Inquiry Number: 1383307-4



The Standard In Environmental Risk Management Information

**440 Wheelers Farms Road
Milford, Connecticut 06460**

Nationwide Customer Service

**Telephone: 1-800-352-0050
Fax: 1-800-231-6802**

Environmental Data Resources, Inc. Historical Topographic Map Report

Environmental Data Resources, Inc.'s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property, and its surrounding area, resulting from past activities. ASTM E 1527-00, Section 7.3 on Historical Use Information, identifies the prior use requirements for a Phase I environmental site assessment. The ASTM standard requires a review of *reasonably ascertainable standard historical sources*. *Reasonably ascertainable is defined as information that is publicly available, obtainable from a source with reasonable time and cost constraints, and practically reviewable.*

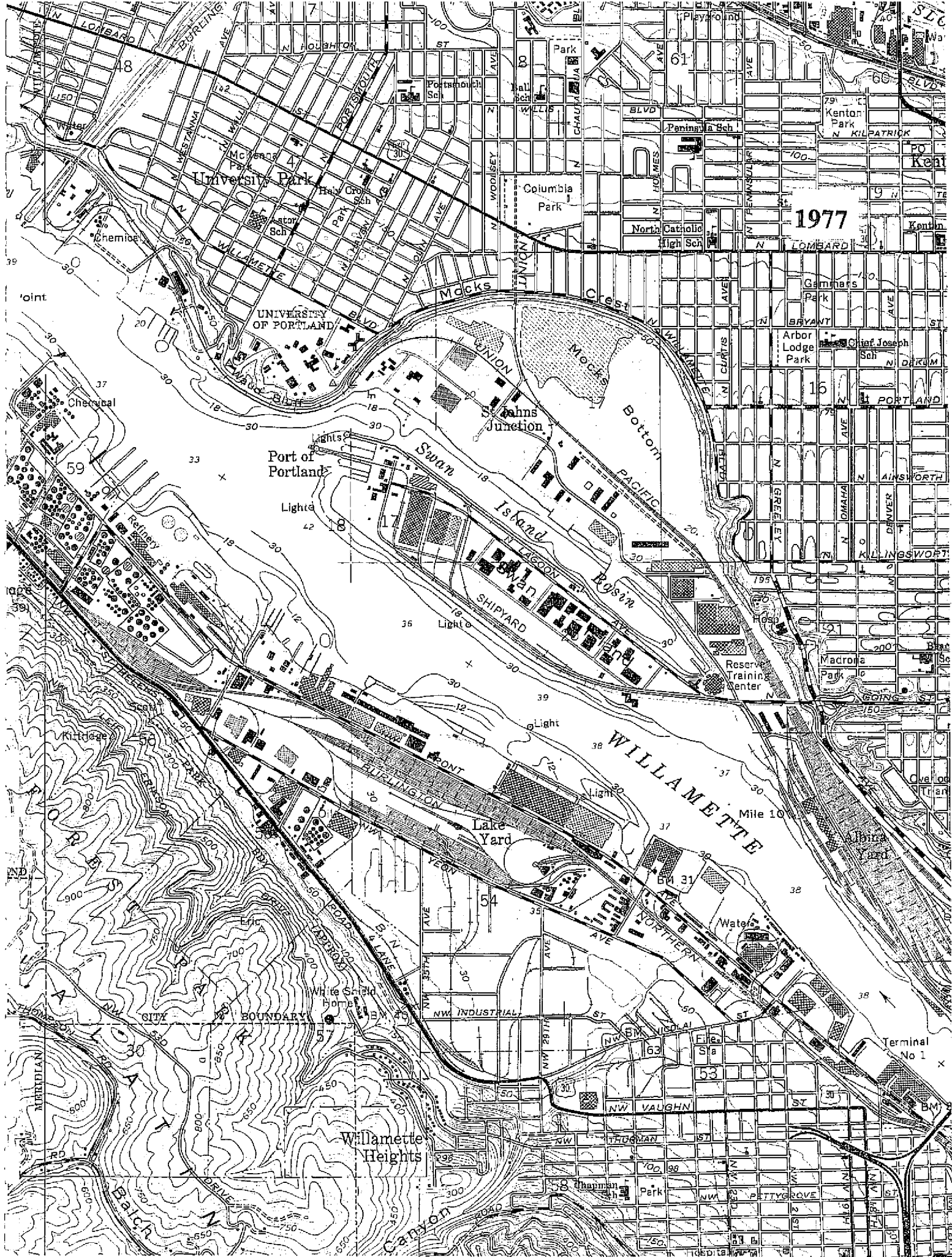
To meet the prior use requirements of ASTM E 1527-00, Section 7.3.4, the following *standard historical sources* may be used: aerial photographs, city directories, fire insurance maps, topographic maps, property tax files, land title records (although these cannot be the sole historical source consulted), building department records, or zoning and use records. ASTM E 1527-00 requires *"All obvious uses of the property shall be identified from the present, back to the property's obvious first developed use, or back to 1940, whichever is earlier. This task requires reviewing only as many of the standard historical sources as are necessary, and that are reasonably ascertainable and likely to be useful."* (ASTM E 1527-00, Section 7.3.2 page 12.)

EDR's Historical Topographic Map Report includes a search of available public and private color historical topographic map collections.

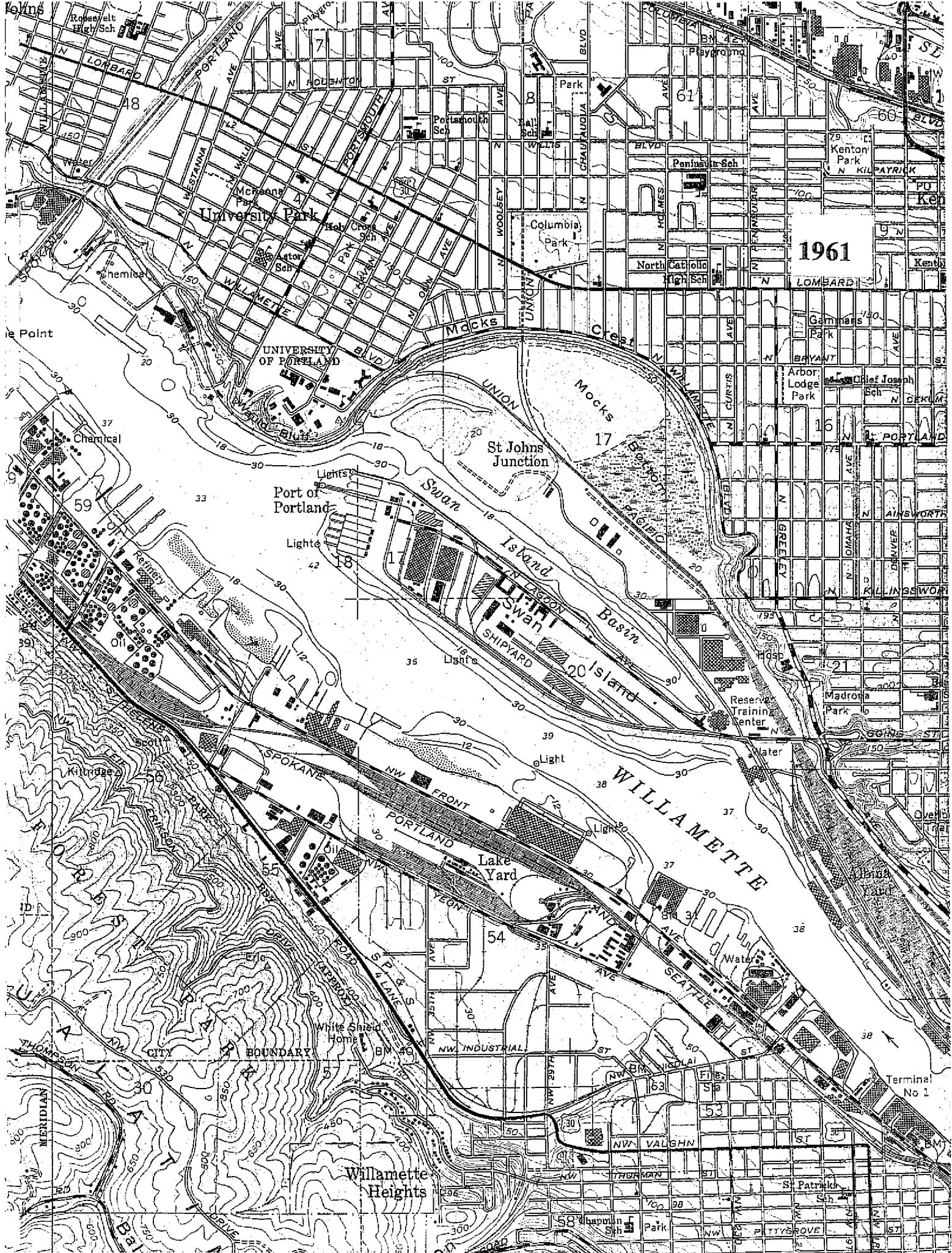
Topographic Maps

A topographic map (topo) is a color coded line-and-symbol representation of natural and selected artificial features plotted to a scale. Topos show the shape, elevation, and development of the terrain in precise detail by using contour lines and color coded symbols. Many features are shown by lines that may be straight, curved, solid, dashed, dotted, or in any combination. The colors of the lines usually indicate similar classes of information. For example, topographic contours (brown); lakes, streams, irrigation ditches, etc. (blue); land grids and important roads (red); secondary roads and trails, railroads, boundaries, etc. (black); and features that have been updated using aerial photography, but not field verified, such as disturbed land areas (e.g., gravel pits) and newly developed water bodies (purple).

For more than a century, the USGS has been creating and revising topographic maps for the entire country at a variety of scales. There are about 60,000 U.S. Geological Survey (USGS) produced topo maps covering the United States. Each map covers a specific quadrangle (quad) defined as a four-sided area bounded by latitude and longitude. Historical topographic maps are a valuable historical resource for documenting the prior use of a property and its surrounding area, and due to their frequent availability can be particularly helpful when other standard historical sources (such as city directories, fire insurance maps, or aerial photographs) are not reasonably ascertainable.







PSY500009779



APPENDIX E
REGULATORY RECORDS DOCUMENTATION



The EDR Radius Map with GeoCheck[®]

**Swan Island Lease Property
N. Channel Ave
Portland, OR 97217**

Inquiry Number: 1383307.2s

March 21, 2005

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06460

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

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Map Findings	6
Orphan Summary	467
EPA Waste Codes	EPA-1
Government Records Searched/Data Currency Tracking	GR-1
 <u>GEOCHECK ADDENDUM</u>	
Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting Source Map	A-7
Physical Setting Source Map Findings	A-8
Physical Setting Source Records Searched	A-12

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

TARGET PROPERTY INFORMATION

ADDRESS

N. CHANNEL AVE
PORTLAND, OR 97217

COORDINATES

Latitude (North):	45.561000 - 45° 33' 39.6"
Longitude (West):	122.715100 - 122° 42' 54.4"
Universal Transverse Mercator:	Zone 10
UTM X (Meters):	522234.9
UTM Y (Meters):	5045095.5
Elevation:	32 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	45122-E6 PORTLAND, OR WA
Source:	USGS 7.5 min quad index

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

FEDERAL ASTM STANDARD

NPL.....	National Priority List
Proposed NPL.....	Proposed National Priority List Sites
CERC-NFRAP.....	CERCLIS No Further Remedial Action Planned
RCRA-TSDF.....	Resource Conservation and Recovery Act Information
RCRA-LQG.....	Resource Conservation and Recovery Act Information
ERNS.....	Emergency Response Notification System

STATE ASTM STANDARD

SWF/LF.....	Solid Waste Facilities List
-------------	-----------------------------

EXECUTIVE SUMMARY

INDIAN UST..... Underground Storage Tanks on Indian Land
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

FEDERAL ASTM SUPPLEMENTAL

CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision
Delisted NPL..... National Priority List Deletions
FINDS..... Facility Index System/Facility Identification Initiative Program Summary Report
HMIRS..... Hazardous Materials Information Reporting System
MLTS..... Material Licensing Tracking System
MINES..... Mines Master Index File
NPL Liens..... Federal Superfund Liens
PADS..... PCB Activity Database System
INDIAN RESERV..... Indian Reservations
FUDS..... Formerly Used Defense Sites
UMTRA..... Uranium Mill Tailings Sites
ODI..... Open Dump Inventory
DOD..... Department of Defense Sites
RAATS..... RCRA Administrative Action Tracking System
TRIS..... Toxic Chemical Release Inventory System
TSCA..... Toxic Substances Control Act
SSTS..... Section 7 Tracking Systems
FTTS INSP..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

STATE OR LOCAL ASTM SUPPLEMENTAL

OR SPILLS..... Spill Data
AOC COL..... Columbia Slough
AST..... Aboveground Storage Tanks
CDL..... Uninhabitable Drug Lab Properties
DRYCLEANERS..... Drycleaning Facilities
HIST LF..... Old Closed SW Disposal Sites
OR HAZMAT..... Hazmat/Incidents
HSIS..... Hazardous Substance Information Survey

EDR PROPRIETARY HISTORICAL DATABASES

Coal Gas..... Former Manufactured Gas (Coal Gas) Sites

BROWNFIELDS DATABASES

US BROWNFIELDS..... A Listing of Brownfields Sites
Brownfields..... Brownfields Projects
AUL..... Sites with Engineering or Institutional Controls

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

FEDERAL ASTM STANDARD

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 12/14/2004 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
PORT OF PORTLAND-SHIP REPAIR Y	T1N,R1E,S20,17,18 (SWAN	1/8 - 1/4ESE	C8	14

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 12/15/2004 has revealed that there are 2 CORRACTS sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
UNIVAR USA INC	3950 NW YEON AVE	1/2 - 1 SSW	48	252
COLOR MAGIC INC	4488 NW YEON AVE	1/2 - 1 WSW	O61	385

RCRAInfo: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System(RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-SQG list, as provided by EDR, and dated 11/23/2004 has revealed that there are 11 RCRA-SQG sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
TEMP CONTROL MECHANICAL COMPAN	4800 N CHANNEL AVE	1/8 - 1/4E	B5	12
RIEDEL INTERNATIONAL	4555 N CHANNEL AVE	1/8 - 1/4ESE	G20	20
SAFCO SAFE TRANSPORT	4537 N CHANNEL AVE	1/8 - 1/4ESE	G22	22
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
ARCO C/O WRIGHT SCHUCHART AND	5100 N CHANNEL AVE	0 - 1/8 N	A2	6
DSU PETERBILT & GMC INC	5555 N LAGOON AVE	1/8 - 1/4NNE	E11	15
FOSS ENVIRONMENTAL SERVICES	5420 N LAGOON AVE BLDG	1/8 - 1/4ENE	F13	16
USEPA OREGON 1996 FLOOD EMERGE	5420 N LAGOON AVE	1/8 - 1/4ENE	F14	17

EXECUTIVE SUMMARY

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
CROSBY & OVERTON	5420 N LAGOON	1/8 - 1/4 ENE	F16	18
FREIGHTLINER TEST CENTER	5411 N LAGOON AVE	1/8 - 1/4 ENE	F17	19
BRAUN INTERTEC CORP INC	5405 N LAGOON AVE	1/8 - 1/4 ENE	F19	19
PORTLAND PORT OF SHIP REPAIR Y	6000 N LAGOON AVE	1/8 - 1/4 N	21	21

STATE ASTM STANDARD

ECSI: The Environmental Cleanup Site Information System records information about sites in Oregon that may be of environmental interest. The data come from the Department of Environmental Quality.

A review of the SHWS - ECSI list, as provided by EDR, has revealed that there are 31 SHWS - ECSI sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
AUTOMATIC VENDING CO	5001 N LAGOON	1/4 - 1/2 ESE	30	59
SHAVER TRANSPORTATION	4900 NW FRONT AVE	1/2 - 1 SW	37	134
SCHNITZER - KITTRIDGE	4959 NW FRONT AVE	1/2 - 1 SW	38	148
GLACIER NORTHWEST INC	5034 NW FRONT AVE	1/2 - 1 SW	39	163
GUNDERSON INC.	4350 NW FRONT AVE	1/2 - 1 S	K41	172
Not reported	5501 NW FRONT	1/2 - 1 WSW	L46	213
FRONT LP PROPERTIES	4950; 5034 AND 5200 NW	1/2 - 1 W	47	238
UNIVAR USA INC	3950 NW YEON AVE	1/2 - 1 SSW	48	252
CONTAINER RECOVERY	3900 NW YEON	1/2 - 1 SSW	49	292
MCCALL OIL	5550 NW FRONT AVE	1/2 - 1 WSW	50	296
Not reported	4927 NW FRONT	1/2 - 1 WSW	51	312
MCWHORTER INC.	4155 NW YEON AVE	1/2 - 1 SW	52	325
TRUMBULL ASPHALT PLANT	3605 NW 35TH AVE (3750	1/2 - 1 SSW	N57	350
MT. HOOD CHEMICAL CORP.	4444 NW YEON AVE	1/2 - 1 WSW	58	356
DURA INDUSTRIES INC	4466 NW YEON	1/2 - 1 WSW	59	362
MT. HOOD CHEMICAL PROPERTY	4488 NW YEON AVE	1/2 - 1 WSW	O60	380
BRAZIL & CO.	4315 NW ST. HELENS RD	1/2 - 1 WSW	62	392
CHRISTENSON OIL	3821 NW ST HELENS RD	1/2 - 1 SW	P63	396
EQUILON ENTERPRISES LLC PORTLA	3800 NW ST HELENS RD	1/2 - 1 SW	P64	416

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
SWAN ISLAND PORTLAND SHIP YARD	SWAN ISLAND	1/4 - 1/2 NNW	25	23
GI TRUCKING	5820 N BASIN AVE	1/4 - 1/2 NNE	J32	66
FREIGHTLINER PARTS MANUFACTURI	5400 N BASIN AVE	1/2 - 1 ENE	34	70
OFFICE DEPOT	5885 N BASIN AVE	1/2 - 1 NNE	35	106
LAKESIDE INDUSTRIES	4850 NW FRONT AVENUE	1/2 - 1 SW	36	117
FRED DEVINE DIVING AND SALVAGE	6211 N ENSIGN	1/2 - 1 N	42	190
FRED MEYER - SWAN ISLAND	3205 N WEBSTER ST	1/2 - 1 E	43	197
Not reported	6936 N FATHOM ST	1/2 - 1 N	44	203
BASIN AVE. BOAT DOCK DRUM	6767 N BASIN AVE	1/2 - 1 NNW	M53	334
SWAN ISLAND DRUM #1	6767 N BASIN AVE	1/2 - 1 NNW	M54	343
SWAN ISLAND DRUM #2	6767 N BASIN AVE	1/2 - 1 NNW	M55	347
STEVEDORING SERVICES AMER	3556 NW FRONT AVE	1/2 - 1 SSE	65	457

EXECUTIVE SUMMARY

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Quality's LUST Database List.

A review of the LUST list, as provided by EDR, and dated 12/21/2004 has revealed that there are 12 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
TEMP CONTROL MECHANICAL CORP	4800 N CHANNEL AVE	1/8 - 1/4 E	B4	7
BOISE CASCADE OFFICE PRODUCTS	4660 N CHANNEL AVE	1/8 - 1/4 ESE	D10	15
P.O.P. SHIP REPAIR AHOT	5555 N CHANNEL	1/4 - 1/2 WNW	H23	22
PORTLAND SHIPYARD	5555 N. CHANNEL AVENUE	1/4 - 1/2 WNW	H24	23
PACIFIC DETROIT DIESEL ALLISON	5061 NORTH LAGOON	1/4 - 1/2 E	I26	51
PACIFIC DETROIT DIESEL ALLISON	5061 N LAGOON AVE	1/4 - 1/2 E	I27	51
TYLER-DAWSON	5051 N LAGOON	1/4 - 1/2 E	I28	54
TYLER-DAWSON SUPPLY CO	5051 N LAGOON	1/4 - 1/2 E	I29	59
AUTOMATIC VENDING CO	5001 N LAGOON	1/4 - 1/2 ESE	30	59
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
P.I.E. NATIONWIDE, INC.	5550 N BASIN AVE	1/4 - 1/2 NE	31	65
GI TRUCKING	5820 N BASIN AVE	1/4 - 1/2 NNE	J32	66
ROADWAY EXPRESS, INC.	5820 NORTH BASIN	1/4 - 1/2 NNE	J33	69

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Quality's UST List on Disk.

A review of the UST list, as provided by EDR, and dated 10/04/2004 has revealed that there are 10 UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
TEMP CONTROL MECHANICAL CORP	4800 N CHANNEL AVE	1/8 - 1/4 E	B4	7
FREIGHTLINER CORP.	4747 N CHANNEL AVE	1/8 - 1/4 ESE	C6	12
VACANT	4325 N COMMERCE ST	1/8 - 1/4 ESE	D9	15
BOISE CASCADE OFFICE PRODUCTS	4660 N CHANNEL AVE	1/8 - 1/4 ESE	D10	15
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
C.H. MURPHY, INC.	5565 N DOLPHIN ST	0 - 1/8 NNW	3	6
H N F PROPERTIES	5300 N CHANNEL AVE	1/8 - 1/4 NW	7	13
DSU-PETERBILT & GMC, INC.	5555 N LAGOON AVE	1/8 - 1/4 NNE	E12	16
CROSBY & OVERTON, INC.	5420 N LAGOON	1/8 - 1/4 ENE	F15	18
WESTERN MACK SALES & SERVICE I	5411 N LAGOON AVE	1/8 - 1/4 ENE	F18	19
BRAUN INTERTEC CORP INC	5405 N LAGOON AVE	1/8 - 1/4 ENE	F19	19

OR CRL: Sites that are or may be contaminated and may require cleanup.

A review of the OR CRL list, as provided by EDR, has revealed that there are 9 OR CRL sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
AUTOMATIC VENDING CO	5001 N LAGOON	1/4 - 1/2 ESE	30	59
GUNDERSON INC.	4350 NW FRONT AVE	1/2 - 1 S	K40	172

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
CHEVRON USA ASPHALT REFINERY	5501 NW FRONT AVE	1/2 - 1 WSW L45		213
UNIVAR USA INC	3950 NW YEON AVE	1/2 - 1 SSW 48		252
MCCALL OIL	5550 NW FRONT AVE	1/2 - 1 WSW 50		296
TRUMBULL ASPHALT PLANT	3605 NW 35TH AVE (3750	1/2 - 1 SSW N56		350
EQUILON ENTERPRISES LLC PORTLA	3800 NW ST HELENS RD	1/2 - 1 SW P64		416
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
SWAN ISLAND PORTLAND SHIP YARD	SWAN ISLAND	1/4 - 1/2 NNW 25		23
FREIGHTLINER PARTS MANUFACTURI	5400 N BASIN AVE	1/2 - 1 ENE 34		70

OR VCS: Responsible parties have entered into an agreement with DEQ to voluntarily address contamination associated with their property.

A review of the OR VCS list, as provided by EDR, and dated 02/10/2005 has revealed that there is 1 OR VCS site within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
SWAN ISLAND PORTLAND SHIP YARD	SWAN ISLAND	1/4 - 1/2 NNW 25		23

STATE OR LOCAL ASTM SUPPLEMENTAL

OR UIC: DEQ's Underground Injection Control Program is authorized by the Environmental Protection Agency (EPA) to regulate all underground injection in Oregon to protect groundwater resources.

A review of the UIC list, as provided by EDR, and dated 01/26/2005 has revealed that there is 1 UIC site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
INDOOR BILLBOARD(OWNER:INDOOR	5140 N CHANNEL AVE.	0 - 1/8 N	A1	6

BROWNFIELDS DATABASES

OR VCS: Responsible parties have entered into an agreement with DEQ to voluntarily address contamination associated with their property.

A review of the OR VCS list, as provided by EDR, and dated 02/10/2005 has revealed that there is 1 OR VCS site within approximately 0.5 miles of the target property.

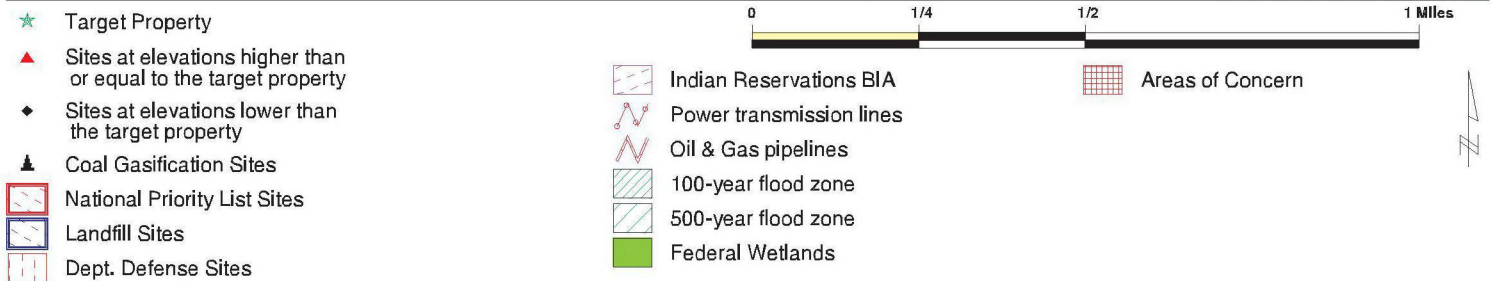
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
SWAN ISLAND PORTLAND SHIP YARD	SWAN ISLAND	1/4 - 1/2 NNW 25		23

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
ANDERSON BROTHERS PROPERTY	SHWS - ECSI, OR CRL
WELCH PROPERTY - 9902-03 N. HURST	SHWS - ECSI, OR VCS
END OF SWAN ISLAND LAGOON	SHWS - ECSI, FINDS, OR VCS
ST HELENS ROAD PETROLEUM CONTAMINA	SHWS - ECSI
CITY OF PORTLAND OUTFALLS	SHWS - ECSI, FINDS, OR VCS
WILLBRIDGE YARD	SHWS - ECSI
PGE - FOREST PARK PROPERTY	SHWS - ECSI, OR VCS
TEXACO PRODUCT PIPELINE	SHWS - ECSI, FINDS, OR VCS
GROUNDWATER - NW 22ND AVE	SHWS - ECSI, FINDS
HENRY WONG	SHWS - ECSI
CROSBY & OVERTON	SHWS - ECSI
FOREST PARK DRAINAGE TUNNEL (FORME	SHWS - ECSI, OR VCS
SAUVIE ISLAND DRUM SITE	SHWS - ECSI, FINDS
HAYDEN ISLAND DRUM	SHWS - ECSI, FINDS
PACIFIC POWER & LIGHT - DEKUM SUBS	SHWS - ECSI, FINDS, OR VCS
PACIFIC POWER & LIGHT - MASON SUBS	SHWS - ECSI, OR VCS
PETROLEUM RELEASE - N EDGEWATER ST	SHWS - ECSI
WILLAMETTE COVE	SHWS - ECSI, FINDS, OR VCS
HAYDEN ISLAND DUMPING AREA	SHWS - ECSI, FINDS
TRI-MET LIGHT RAIL - INTERSTATE LI	SHWS - ECSI, OR VCS
BLUE LAGOON - MARINE TERMINAL 5	SHWS - ECSI, OR VCS
SOUTH RIVERGATE INDUSTRIAL PARK	SHWS - ECSI
COLUMBIA SLOUGH	SHWS - ECSI
MULTNOMAH COUNTY - ST. JOHNS SITE	SHWS - ECSI, OR VCS
V.A.- COLUMBIA SOUTH SHORE WELLFIE	SHWS - ECSI
1610 NORTH PIER 99 STREET	SHWS - ECSI, OR VCS
LACAMAS LABORATORIES	SHWS - ECSI, OR VCS
ST. JOHNS - KEELER #2 RIGHT-OF-WAY	SHWS - ECSI, OR CRL
SHELL OIL CO. - WILLBRIDGE PLANT	SHWS - ECSI
MAGNUS CO.	SHWS - ECSI
SANTA FE PACIFIC PIPELINES - PORTL	SHWS - ECSI
PORTLAND HARBOR SUPERFUND SITE	SHWS - ECSI
WILLAMETTE RIVER DRUM	SHWS - ECSI, FINDS
NEW COLUMBIA HOPE VI	SHWS - ECSI, OR VCS
BURLINGTON NORTHERN RAILROAD LAKE	SHWS - ECSI, OR CRL, OR VCS
SCHNITZER INVESTMENT - NEAR NW 35T	SHWS - ECSI
CROSBY & OVERTON	CERC-NFRAP
CLEANERY THE - ALBANY	FINDS, DRYCLEANERS
RIFER REAL ESTATE DELVP PROPERTY	LUST
BEN MAY PROPERTY	LUST

OVERVIEW MAP - 1383307.2s - SCS Engineers

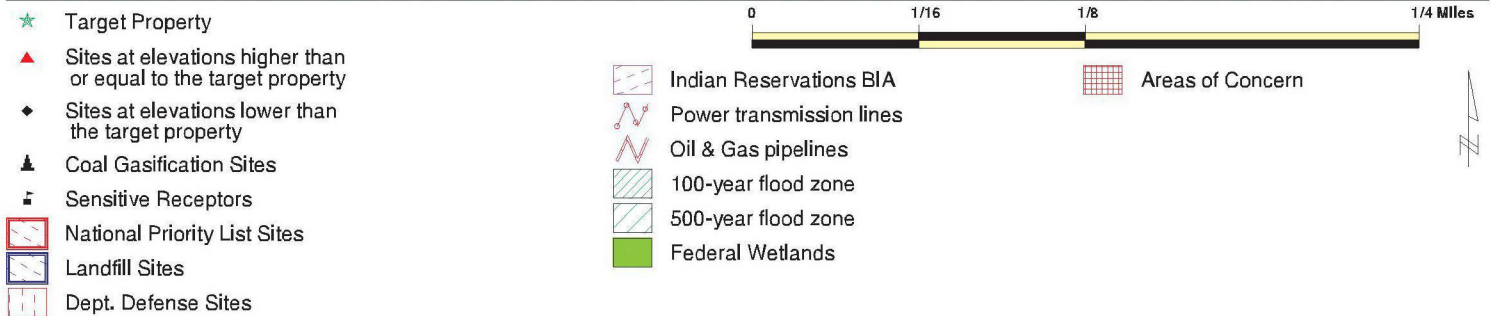
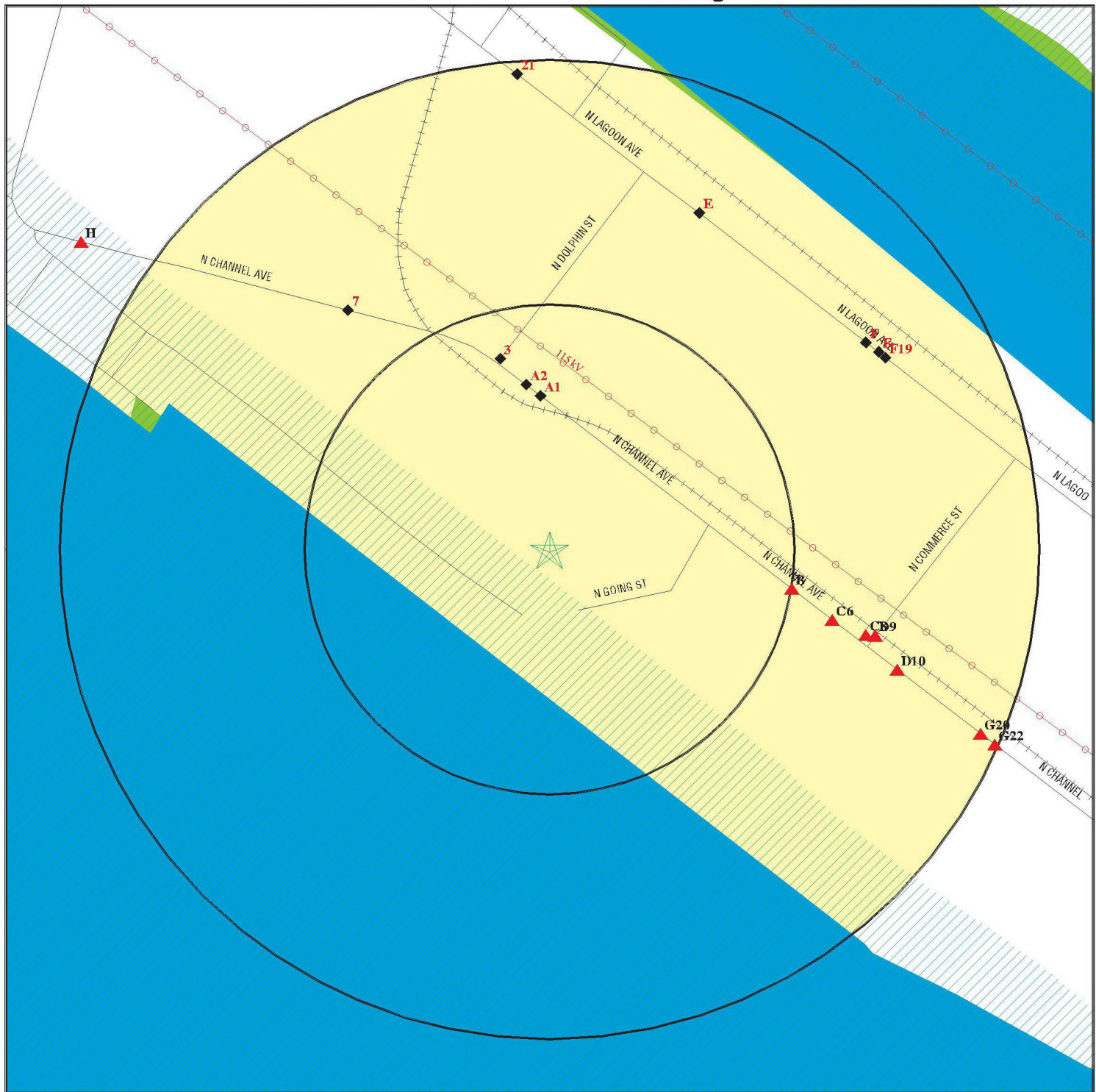


TARGET PROPERTY: Swan Island Lease Property ADDRESS: N. Channel Ave CITY/STATE/ZIP: Portland OR 97217 LAT/LONG: 45.5610 / 122.7151	CUSTOMER: SCS Engineers CONTACT: Greg Helland INQUIRY #: 1383307.2s DATE: March 21, 2005 3:51 pm
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PSY500009791

DETAIL MAP - 1383307.2s - SCS Engineers



TARGET PROPERTY: Swan Island Lease Property ADDRESS: N. Channel Ave CITY/STATE/ZIP: Portland OR 97217 LAT/LONG: 45.5610 / 122.7151	CUSTOMER: SCS Engineers CONTACT: Greg Helland INQUIRY #: 1383307.2s DATE: March 21, 2005 3:51 pm
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PSY500009792

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Target Property</u>	<u>Search Distance (Miles)</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
<u>FEDERAL ASTM STANDARD</u>								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
CERCLIS		0.500	0	1	0	NR	NR	1
CERC-NFRAP		0.250	0	0	NR	NR	NR	0
CORRACTS		1.000	0	0	0	2	NR	2
RCRA TSD		0.500	0	0	0	NR	NR	0
RCRA Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRA Sm. Quan. Gen.		0.250	1	10	NR	NR	NR	11
ERNS		TP	NR	NR	NR	NR	NR	0
<u>STATE ASTM STANDARD</u>								
State Haz. Waste - ECSI		1.000	0	0	3	28	NR	31
State Landfill		0.500	0	0	0	NR	NR	0
LUST		0.500	0	2	10	NR	NR	12
UST		0.250	1	9	NR	NR	NR	10
OR CRL		1.000	0	0	2	7	NR	9
INDIAN UST		0.250	0	0	NR	NR	NR	0
INDIAN LUST		0.500	0	0	0	NR	NR	0
OR VCS		0.500	0	0	1	NR	NR	1
<u>FEDERAL ASTM SUPPLEMENTAL</u>								
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
INDIAN RESERV		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
<u>STATE OR LOCAL ASTM SUPPLEMENTAL</u>								
OR SPILLS		TP	NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Target Property</u>	<u>Search Distance (Miles)</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
AOC COL		1.000	0	0	0	0	NR	0
AST	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
UIC		0.250	1	0	NR	NR	NR	1
HIST LF		0.500	0	0	0	NR	NR	0
OR HAZMAT	TP		NR	NR	NR	NR	NR	0
HSIS	TP		NR	NR	NR	NR	NR	0

EDR PROPRIETARY HISTORICAL DATABASES

Coal Gas		1.000	0	0	0	0	NR	0
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BROWNFIELDS DATABASES

US BROWNFIELDS		0.500	0	0	0	NR	NR	0
Brownfields		0.500	0	0	0	NR	NR	0
AUL		0.500	0	0	0	NR	NR	0
OR VCS		0.500	0	0	1	NR	NR	1

NOTES:

AQUIFLOW - see EDR Physical Setting Source Addendum

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database